A new clarity The company's Operational Framework evolves See pages 04-05



Show of strength VIP customers see the best at Farnborough See page 07

Going for gold in Washington Turn to page 08 for full details



'These are among the best in the business.

Company-wide news from BAE Systems plc • Quarter 4 2006

# **BAESYSTEMS**News

## Resultsset course for robust future

Chief executive's message

Once again BAE Systems has delivered a good firsthalf financial performance, with good programme schedule and cost execution right across the company.

Following the release of our interim results on 13 September, we have received positive reports from the investment community, having exceeded its expectations.

The performance of our US business has again been excellent with our expansion in the US market over recent years bearing fruit.

In the UK, the good progress has continued with the large weapon system programmes on track, hitting cost and schedule milestones. Implementation of the Defence Industrial Strategy (DIS) is now a key area of focus for us. The resolution of deficit funding for our pension schemes was a good result for all concerned.

We have moved forward with a number of export opportunities, most notably the selection of Typhoon in the Kingdom of Saudi Arabia. Also significant was the decision to sell our shareholding in Airbus on the basis that it is non-strategic and that a sale now is in the long-term interests of our shareholders.

#### US businesses

In the US the integration of the former UDI business into BAE Systems has been successfully completed. Both the US Land & Armaments activities and the ship repair activities that comprised the acquired UDI business are performing well. In particular, the land business is benefiting from a sustained high level of reset and upgrade activity. In May, the US land business was awarded a contract to supply light armoured vehicles to the Iraqi armed forces.

Healthy first-half performance reinforces BAE Systems' reputation as a high-performing business with good key market positions

In the Electronics Intelligence & Support (EI&S) business we are experiencing strong demand for electronic protection systems including the Common Missile Warning Receiver and we achieved important milestones on the F-35 electronic warfare suite.

We also achieved a significant win with the prime contract award to develop the Advanced Precision Kill Weapon System, a laser guided-rocket system.

Our Customer Solutions business has been awarded a prime-contractor role for the Enterprise Gateway for Leading Edge Solutions (EAGLE) programme, providing software development and management support services to the Department of Homeland

We continue to look for



**WE HAVE NO** DOUBT THAT **OUR ROBUST** LONG-TERM PLAN WILL DELIVER HEALTHY. **PROFITABLE GROWTH** 

Mike Turner, BAE Systems

chief executive

opportunities to grow our

US business by acquisition, but any further moves will have to continue to meet our strict value creation criteria. In the meantime, the organic growth of our US business continues at a healthy pace.

**UK** businesses

At the end of last year, the UK Government published its Defence Industrial Strategy. DIS is a very significant change programme for both industry and the Ministry of Defence (MOD). It will shape the future level of BAE Systems' involvement in the UK defence industrial base as it is implemented, specifically, by the content of the longterm partnering agreements (LTPAs) currently being discussed with the MOD in the air, land and naval sectors.

The LTPAs will specify the future capabilities and requirements for each sector, enabling both the MOD and industry to make longterm investment decisions with a greater degree of certainty than has previously been possible.

BAE Systems is well requirements, building on our continued strong performance within the programmes and development of the support businesses.

#### Programmes

Our performance on large complex weapon system programmes has been good, meeting cost targets and schedule milestones Examples include:

· Flight development of the Nimrod MRA4 programme continues as

Continued on page 02



Mark Ronald (above), president and chief executive officer of BAE Systems, Inc., displays the John Curtis Sword Award which he received at the Farnborough International Air Show in July.

Presented biennially by the editors of Aviation Week & Space Technology, the award is given to those who best demonstrate transatlantic leadership and co-operation in the aerospace industry. It is named in honour of John Curtis, a UK Aviation Week & Space Technology director who worked to foster close ties between the US and the UK aerospace community. After his death friends and colleagues presented the publication with

#### Mark Ronald honoured with John Curtis Sword

a Wilkinson sword in his honour.

"We're extremely proud to award the Curtis Sword to Mark Ronald," said Tom Henricks, Aviation Week president.

"His energy and leadership across the Atlantic reflect the spirit of the Curtis Sword to foster Anglo-American aerospace co-operation."

In his acceptance remarks, Mark said it had deeply involved in forming closer and stronger ties

between the US and the

"We are, without a doubt, the closest of allies. We share a common heritage. common values, and common interests around the world. The men and women of our Armed Forces are today serving together shoulder to shoulder - in harm's way protecting our way of life and securing freedom for many who have never experienced it.

"The challenge for those of us in industry, along with our partners in government, is to continue to press ahead to provide our men and women in uniform nothing less than our absolute t that is what they give us in

#### **Executive** changes as two retire from the board

**BAE Systems board** 

BAE Systems has announced the retirement of two executive directors. Michael Lester, group legal director, and Mark Ronald, chief operating officer, and president and chief executive officer of BAE Systems, Inc., will retire on 31 December

Philip Bramwell will join BAE Systems on 1 November and will succeed Michael Lester with effect from 1 January 2007 in the role of group legal director and legal adviser to the board. Philip, who joins BAE Systems from O2, will be a member of the company's executive committee.

Walt Havenstein, currently president of the company's Electronics & Integrated Solutions operating group, will succeed Mark Ronald on 2 January 2007. Walt will continue to serve on the company's executive committee and will be appointed an executive director of BAE Systems plc on 2 January 2007.

Mike Turner, chief executive, said: "I would like to thank both Michael and Mark for their invaluable contribution to securing the success and sustainability of BAE Systems.

"Michael has been a member of the board since BAE Systems was formed and with great wisdom has steered us through many difficult and complex issues.

"Mark has led the development of our US business which has been a key part of strategy on both sides of the

## Charity Challenge's stunning £8m

Community

**Hundreds of Charity** Challengers from across the globe descended on Blackpool, UK, at the end of September for an evening of celebration to mark the end of one of

the most successful Charity Challenge campaigns, and to hear how much money had been raised during the 21-month campaign and who would be the next partner charities

Employees from the UK,

Germany and Saudi Arabia raised a breathtaking total of £8m and volunteered 10,444 days for charities across the world.

Australia, North America.

This amazing total included more than \$6m for non-partner charities in the US and £2m for non-partner UK charities. The amount of volunteer days almost doubles the total from the previous campaign.

Continued on page 03

## **Good progress** in UK and US

#### Continued from page 01

planned and we received the formal production contract in July for nine aircraft plus the later conversion of the three development aircraft to production standard.

 The first pre-production F-35 was rolled out at Fort Worth (see panel) with first flight expected later this

· Following the launch of the first of class Type 45, HMS Daring, outfitting is progressing well to programme. All major blocks for the second ship are now on the berth in preparation for launch on 23 January next year.

•We have now completed both of our originally contracted Landing Ship Dock (Auxiliary) vessels for the Royal Fleet Auxiliary and are now assisting the UK MOD with completion of the fourth ship, Lyme Bay, in addition to taking over lead-yard responsibility for the ship class

• The Astute submarine programme is also progressing well. Live switchboards was a key 2006 milestone that opens the boat for commissioning activity. Launch date for the first of class has now been set for 8 June 2007.

·We achieved the scheduled in-service date for the upgraded FV430 armoured fighting vehicle (AFV).

In addition to meeting the requirements of our UK customer, the competitiveness of our products continues to result in successes in other markets. In July we signed a letter of intent with Malaysia for a second batch of two frigates and we are now working towards detailed contracts, as well as making good progress towards contracts to supply Typhoon aircraft to the Kingdom of Saudi Arabia.

#### Support

We continue to develop our support capabilities. This remains an area with many opportunities for valuable **≰PERFORMANCE ON LARGE** COMPLEX WEAPON SYSTEM PROGRAMMES HAS BEEN GOOD, MEETING COST TARGETS AND SCHEDULE MILESTONES

business growth, while delivering a reduction in the MOD's in-service cost, improving equipment availability and consequently front-line capability for the Armed Forces. The pioneering work that BAE Systems has undertaken in partnership with the UK Defence Logistics Organisation to support Tornado aircraft is being replicated across MOD's fixed-wing fleet. Within the land sector, we continue to successfully introduce AFV partnered support arrangements and we are making progress towards the transformation of arrangements for the supply of munitions.

Pension Scheme Funding

Pension funding has been a big issue for the company. In June, we presented the innovative agreements that have been reached to address the deficits in the UK. The revised funding plan has been achieved through a combination of higher company and employee contribution rates, reducemployees and some one-off cash and asset contributions by the company.

In the US, we have addressed the deficit through the implementation of a new scheme to ensure that the company continues to provide employees with a valuable defined benefit plan that is competitive within the market.

Through excellent communications and months of detailed discussions we have achieved a very good outcome for all concerned.

#### Other domestic markets

We are delivering our global strategy. BAE Systems not only has strong positions in the UK and US markets but we have a significant presence in the other important markets of Australia, Saudi Arabia, South Africa and Sweden. In all six countries, BAE Systems is recognised as an important on-shore defence and aerospace supplier. We intend to continue to strengthen our position as part of the defence industrial base of those countries. A

Name from the past for fighter of the future

A major programme on which performance has been meeting scheduled milestones is the F-35 Joint Strike Fighter (JSF).

The first F-35 aircraft, a conventional take-off and landing variant, was unveiled at a ceremony on 7 July at Fort Worth, Texas.

At the ceremony, the aircraft was officially named the F-35 Lightning II, echoing two formidable fighters of the past: the Second World War-era P-38 Lightning and the mid-1950s Lightning supersonic jet fighter.

The US Deputy Secretary of Defense Gordon R. England told

growth opportunity is the

company's role in support-

ing the partnership between

the governments of the

Kingdom of Saudi Arabia

and the UK in updating the

capability of the Kingdom's

Armed Forces. In this

context we are committed to

assisting the Kingdom in

developing its defence

industrial base and the train-

ing and up-skilling of its

workforce.

BAE Systems in



guests at the event: "The Joint Strike Fighter is a giant step forward for unity of effort and meeting the security challenges of the 21st century.

The F-35 is setting the

important market for

BAE Systems for many

decades and we see the

opportunity for this to contin-

ue and strengthen into the

future. We have been pursu-

ing a strategy to transition

our Saudi business from a

UK-centric export sales

operation to a significant in-

Kingdom presence and to

firmly establish Saudi Arabia

as an important market. In

line with this strategy we

have been making signifi-

cant investments in the

Industrialisation is a key

feature of the modernisation

programme and the com-

mitment to Typhoon will

allow us to build on the

established Tornado sup-

port activity. We also see

opportunities for new busi-

ness in other areas. As in the

UK, Typhoon and Tornado

are expected to operate side

by side for many years and

our in-country investments

are expected to generate

returns for our shareholders

Turning to our portfolio of

businesses in Europe.

Saab has had a good six

months and MBDA is per-

over many decades.

European business

Kingdom.

standard for close He added that it was a catalyst for

forming well, with good

future opportunities. We

were pleased to receive the

commitment to a long-term

partnering agreement, inc-

luding development work

This is excellent news

in terms of preserving

capabilities and business

within MBDA. We have also

continued to execute the

divestment of those busi-

nesses that were non-core to

our strategy. After a lengthy

regulatory process the Atlas

sale was completed in

The decision to sell Airbus

was a very significant step in

delivering our strategy. We

for complex weapons.

friends and allies". English Electric, maker of the Lightning iet. later became part of BAE Systems. The P-38 Lightning was built by Lockheed, now

co-operation between government and our partners in industry." "interdependence with close international

Lockheed Martin. of risk and reward favours a recommendation to exit at this value, at this time.

interests of our sharehold-An extraordinary general meeting was held on 4 October where we saw shareholders approve the sale with a 99.85 per cent

And is in the long-term

majority. Following the sale of Airbus, BAE Systems will be a high-performing defence and aerospace business. And with good key market positions, we have no doubt that our robust long-term plan will deliver healthy. profitable growth for our shareholders.

## have now published the

circular to shareholders with the board's recommendation. Having exercised our put option we were surprised by the EADS' announcement of cost increases on the A380 programme.

The audit of Airbus that we have conducted has enabled us to better understand the facts behind the announcement. Inevitably, there are many moving parts and many critical assumptions in a business like Airbus, but we have concluded that the balance

#### Summary

In summary, we are now performing well, with consistently good programme schedule and cost performance. This good execution is resulting in the delivery of good financial performance and we are well positioned for future growth with a strong footprint in six key

These factors give us confidence that we will continue to deliver good profitable growth in line with our long-

#### Saudi Arabia Saudi Arabia has been an tions in future benefits for particularly important

- » ADHERENCE TO PROGRAMME SCHEDULE
- )) GOOD PERFORMANCE ACROSS THE GROUP
- PENSION FUNDING DEFICIT
- ) GOOD PROGRESS ON EXPORT OPPORTUNITIES
- DOMESTIC MARKETS

#### )) GOOD FIRST HALF PERFORMANCE AHEAD OF PLAN SUPPORTING FULL YEAR OUTLOOK

- AND COST EXECUTION
- SUCCESSFUL RESOLUTION OF THE
- » SUCCESSFUL DEVELOPMENT OF SIX

## 'Special relationship' facing new challenges

#### Working together

Dick Olver, chairman of BAE Systems, gave a keynote address at a dinner at the Woodrow Wilson International Center for Scholars in Washington, DC in July.

The dinner, which focused on the state of the relationship between the United States and United Kingdom from the perspectives of defence, security and trade, was attended by nearly 70 top industry representatives, US Government officials, members of the media and BAE Systems board members from the US and UK

Dick told his audience that he believed the US and the UK still shared a "special relationship" despite the

#### Chairman gives keynote speech on state of UK-US partnership

loosening of traditional ties with the end of the Cold War, the UK's involvement in the EU and the US's focus on its partners in the Pacific.

He reaffirmed that the US and the UK had the closest bilateral relationship between sovereign nations in the world today. He noted that this long-lasting and resilient partnership was built on a sure foundation of common values and traditions, strong trade and economic activity, and unparalleled intelligence,

defence, and security co-operation. "The US is by far the

largest investor in the UK, accounting for almost half of all foreign direct investment projects over the past four years," said Dick. "In fact, US-based firms invest as much in the UK as they do in Germany, France, the Netherlands, and Ireland combined. And the UK is the largest investor in the US.1

However, Dick illustrated that the US and UK now faced a new "New World" complete with new challenges including globalisation, population growth, poverty, energy security, environmental issues, terrorism and security. He stressed that the US-UK relationship could continue to be developed to meet the challenges of the twenty-first century, particularly through a combination of education, open markets and technology co-operation.

To confront the multiple challenges of the new 'New World,' I think we need to do three things," he continued. "We need to maintain high value-adding open economies founded on well-educated, wellinformed populations; support free trade, and maintain unbeatable defence and peace-making

Dick Olver, BAE Systems chairman

capabilities within our means.

In addition, Dick called for the US and UK to oppose calls for protectionism, by emphasising that it was essential "to overcome the primitive reflex that foreign equals bad. Foreign investment supports more than five million US jobs. Foreign can be good"

Dick said that history had shown that when the US and UK were aligned and working together, the results were better than either could have delivered alone.

Citing the defence

co-operation between the two nations on the F-35, the chairman said the objective now should be what Woodrow Wilson had called: "... not a balance of power, but a community of power: not organised rivalries, but an organised common peace"

Dick concluded: "We stand on the brink of a new world in which old certainties will be overturned. In the US and UK, we need to use all of our combined experience, wisdom, judgment, skill and partnership if we are to retain our leadership.

"But if we continue to work together effectively, then we can help to shape the new world, not only for our benefit, but for its entire people."



in Washington

WE STAND ON THE BRINK OF A NEW WORLD IN WHICH OLD CERTAINTIES WILL BE OVERTURNED!

# Stand together and deliver

The UK's Defence Industrial Strategy has triggered a transformation of supplier relationships

#### **Delivering value**

BAE System's supply chain is evolving. In 1999 when the company was created in its current form, the number of suppliers with which we have had a direct relationship stood at 75,000. Since then, this total has been whittled down to about 15,000.

The Defence Industrial Strategy (DIS), the UK government's roadmap for the defence industry, is set to trigger the next stage in our supply chain's evolution.

The DIS recognises that Britain's supply chain, which includes many small and medium-size enterprises (SMEs), is crucial to UK industry retaining its competitive edge in defence technology. The supply base is also crucial to BAE Systems itself. Chief operating officer (COO) Chris Geoghegan says: "A healthy [supply] industry means a healthy environment for our company."

But to stay healthy, our relationship with the supply chain must change. While traditionally, the Ministry of Defence (MOD) focused largely on its direct suppliers, under DIS, many SMEs will have a fuller role as they respond to the strategy's emphasis on through-life capability and retaining strategic technologies in the UK.

They will be required to adopt the same DIS principles as systems integrators at the defence industry's top table, such as taking a longterm view, fostering the skills and resources to deliver capabilities and having robust business continuity

As DIS is implemented over the next few years, the relationship BAE Systems has with its suppliers must evolve to meet this new challenge. Group strategic development director Alison Wood said: "The key message is that we have to actively look at ways to work in partnership with our supply chain. It is about giving suppliers a long-term sustainable future.

The Society of British Aerospace Companies ing "a spirit of collaboration in the industry, with a focus on delivering the right capability for the Armed Forces in a manner which is costeffective for the customer and profitable for the supply

The key to UK-based suppliers maintaining their competitive edge is pruning out cost. SBAC spokesman Paul Everitt said: "The UK aerospace industry is the biggest outside of the US. To maintain that position, we need to improve it at a faster rate than the competition."

For years, the SBAC has encouraged suppliers to embrace concepts such as "lean manufacturing" where the whole chain is constantly put under scrutiny to iron out inefficiencies and waste. It has been working with and learning from the automotive industry to do this.

A supply chain, working together collaboratively under the model suggested by DIS, might be able to achieve greater cost savings - and thereby greater competition or productivity gains - than a company working alone. Paul said: "There is a quid pro quo to this. Big companies [like BAE Systems] can play a part in the way they manage the supply chain. They can give their suppliers greater certainty on things like future level of demand and contractual relationships."

Our Submarines business has already made progress driving down costs on the Astute-class submarine programme through a new type of contractual agreement, coupled with transparency on targets and open communication.

BAE Systems and nine main suppliers on Astute, who together represent 80 per cent of the spend on programme, have set up a "suppliers' club" which has reduced projected future costs by 19 per cent.

The suppliers are encouraged to bring down the price of products, but their



Above: Chris Geoghegan, chief operating officer



Above: BAE Systems Submarines has set up a "suppliers' club" which has helped to drive down costs on the Astute class submarine programme

#### **4WE WILL BE INVOLVING KEY** SUPPLIERS MUCH MORE THAN WE HAVE DONE IN THE PAST!

profit margins are ringfenced and remain intact. This ring-fencing offers the suppliers incentives for performing well - a central plank of DIS - and has led to some innovative thinking.

Supplier York International suggested future Astuteclass boats have two large but cheaper chiller plants taken from the commercial world rather than three smaller but more expensive ones from the military domain. The overall cost of providing these units will reduce by 35 per cent

Huw James, Astute's procurement and business strategy director says the suppliers' club, which includes Rolls-Royce, Thales, Weir Strachan and Henshaw as well as representatives from the Defence Procurement Agency, Defence Logistics Organisation and Department of Trade and Industry, shows BAE Systems is "capable of leading a group of industrialists in a win-win situation". He says: "If we want to continue the submarine programme, we must continue to reduce costs, understand its tragility and make its cost base one that the MOD will take forward."

An industry-wide initiative to help Britain's supply chain respond to the changing

world of industry under DIS was launched in March. Called Action Plan for 21st Century Supply Chains (SC21), it aims are to improve supply chain relationships, focus on supply chain development and performance and to reduce auditing requirements.

addition to BAE Systems, 31 companies, large and small, have now signed up to the initiative. SC21 also intends to improve the performance of businesses, draw on innovation from the supply chain and reduce overheads.

An SC21 task force, which meets once a month, is chaired by Russ Armitage our director of strategic supplier management. It consists of senior representatives from organisations including the SBAC, Airbus UK, Bombardier, Cobham, Rolls-Royce, Smiths Aerospace and Thales UK, among others.

This group has been entrusted with drawing up supply chain management standards for supplier accreditation, relationship management, performance metrics and auditing. It opportunities for peer-topeer business discussions between suppliers, and to encourage good and open relationships through use of an industry code.

One of its first jobs will be to audit the industry's supply chains, to identify what is there, and find overlaps that can be eliminated. SC21 will attempt to dramatically reduce the number and diversity of these accreditation initiatives at the big aerospace companies, thereby easing the compliance burden for UK suppliers

COO Chris Geoghegan, who is also president of the SBAC, said: "We can standardise processes better and work to common performance metrics. Many supplier companies have to achieve the same number of accreditations as they have customers. SC21 will implement one common accreditation process so companies only have to

qualify once. SC21 operates in parallel to the defence industrial strategy but will feed into it. "The SBAC is coordinating the generic industry response, and generating energy in the supply chain. SC21 is geared towards mobilising the UK 's defence industry" said

Several of our existing programmes already support the principles of the DIS. In the land sector, one of the areas

BASED ECONOMY

**≰**WE ARE MOVING FROM A

COMPETITION-BASED ENVIRONMENT

INTO A COLLABORATIVE WIN-WIN

of transformation required under a recently-signed partnering agreement between BAE Systems and the UK MOD is supply chain management.

Land Systems' strategic business development. director Dr John Gutteridge recognises the changing need: "We will be involving key suppliers much more than we have done in the past. As a first step towards this, BAE Systems and UK MOD are jointly hosting an industry day to discuss the role of suppliers in our partnering agreement."

In the air sector, what once were several hundred separate contracts for Tornado are being consolidated under just two main contracts, one already run by Rolls-Royce and another to be managed by ourselves. The contracts' participants will be paid by results another example of DIS incentives at work. Lessons learnt from this approach will be fed into our integrated support business model, a tool designed to map experiences so they can be followed in future.

Chris Geoghegan believes one of the biggest challenges to come out of DIS will be changing behaviours. He explained: "We are moving from a competition-

#### **4THE KEY** MESSAGE IS THAT WE HAVE TO ACTIVELY **LOOK AT WAYS** TO WORK IN PARTNERSHIP WITH OUR SUPPLY CHAIN?

Alison Wood, group strategic

based environment into a collaborative win-win based economy. Industry will have to accept performance challenges and incentives. It goes right down the supply

He believes the defence industry would benefit from leveraging more technology from other industries. "Telecoms, for example, provide a lot of computerbased capability that could feed into defence, " he says. "We have got to get more adept at taking it on board and adapting it. I would like to see more 'plug and play' going on rather than technology being made bespoke for defence." He said this had already happened on some programmes, such as Falcon, the British Army's new air-portable battlefield communications network, being supplied by Integrated System Technologies.

Defence procurement minister Lord Drayson shares Chris Geoghegan's view. Earlier this year, he said: "What I am looking for is a lead systems integrator to be not vertically integrated with the supply chain, but to be open-minded, look at the options and bring in expertise and skills supporting the way the MOD is working. That's the added value, and we should be prepared to pay for it."

The UK's defence selectcommittee sees suppliers as being at the beginning of a long road to adapt to the DIS, and the rest of industry - plus the MOD - having a need to better understand its supply chain. It is a long journey.

Lord Drayson considers the reshaping of industry to be a ten-year process to ensure alignment between the defence industry's capabilities and the UK's capabilities in terms of both security and defence priori-

It is up to companies such as ours to help suppliers find their way. The future health of all parties depends

## New charity partners named

Continued from page 01

Simon Reeve, Charity Challenge campaign leader, said: "It has been a great honour to lead this campaign as I have had the pleasure of meeting and working with some very remarkable people. I would like to congratulate

all the Charity Challengers on another very successful campaign and thank them on behalf of all those people who's lives have been touched for the better by Charity Challenge, something we can all be proud of"

Not only was the event an opportunity to celebrate the current partnership charities, but also to announce who we will be supporting in the next 18 month campaign - the UK has voted to support Macmillan; in Australia Cancer Council; and in the US Alzheimer's Association. Thank you to everyone

for their charity. We hope you'll support them no matter who you voted for as all the charities nominated are worthy of our support.

The new campaign leader for the next campaign is Caroline Hanmer. Here's to the next 18

DAVE PENFOLD MEMORIAL AWARD FOR MOST IMPROVED SITE: who nominated and voted Rochester, Platform Solutions

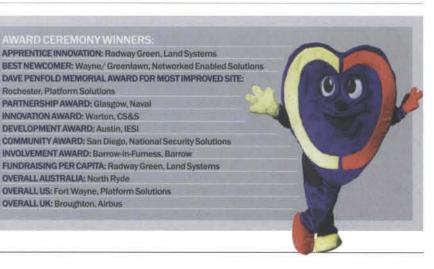
PARTNERSHIP AWARD: Glasgow, Naval INNOVATION AWARD: Warton, CS&S **DEVELOPMENT AWARD: Austin, IESI** 

COMMUNITY AWARD: San Diego, National Security Solutions

APPRENTICE INNOVATION: Radway Green, Land Systems

INVOLVEMENT AWARD: Barrow-in-Furness, Barrow FUNDRAISING PER CAPITA: Radway Green, Land Systems OVERALL AUSTRALIA: North Ryde

OVERALL US: Fort Wayne, Platform Solutions OVERALL UK: Broughton, Airbus



# New Operational Framework,



Key document defines values, policies and processes that guide BAE Systems' work and behaviour

#### Governance

The Operational Framework, a key document for all employees, sets out the way BAE Systems does business and what it means to be part of the Company. Rory Fisher, managing director of the Centre for Performance Excellence, explained the changes and the impact that it will have on BAE Systems:

"The new version, which came into effect on 1 July, arose from the changes the company has been through over the past few years

"In the same way that BAE Systems has grown and evolved, so too has our need for clearer governance. So we have updated the Operational Framework to fit the needs of our company.

"The important point is that, while the new version takes account of the changes we've seen in BAE Systems – like becoming a truly global company – it doesn't change our long-standing governance model." Rory said.

"Instead," he added, "what it does is present in a clear and concise way the set of values, policies and processes that guides what we do and how we behave, and it also details the clear system of delegated authority which is in place.

"One of the changes is that, for the first

AALL OF THIS WILL
HELP US ... TO EMBED
AND DELIVER A HIGH
PERFORMANCE CULTURE
RIGHT ACROSS OUR
GLOBAL COMPANY



Above: Rory Fisher, managing director, Centre for Performance Excellence

time, the Operational Framework lists all 40 BAE Systems lines of business, each with its own profit and loss account and line leader, with their specific responsibilities set out to make it clear what is expected of them.

"Also what we have introduced is a list of the company's 42 mandated policies, processes and reviews and their owners – these are hyperlinked from the online version to help people access that information easily.

"What we need to remember is that although the new version does spell out in real clarity how BAE Systems does business, it is trying to emphasise the importance of people intelligently applying processes to get the best value from them. Organisation

The Board

The Executive Committee

Principal Accountabilities

Line Leaders

Functional Councils Culture

Vision

distance.

Ethical Bu Conduct

Delegated Authorities

"There are too many examples of processes being applied like a checklist without any thought as how to tailor them for the particular situation.

"At its heart," Rory concluded, "the new document is not a corporate rulebook: it's about making it clearer for everyone to understand our values, our culture, our ethics, and our key policies and processes that help drive our performance."

## BAE Systems News asked three senior executives from across the company to outline their views on the new Ope



Vic Emery, managing director, BAE Systems Naval Ships

What has improved most about the OF? It's shorter, cleaner; it's clearer and more readable.

and because it's more readable it's easier to understand. The structure is also a lot better; it brings a lot more clarity to the area of roles and responsibilities and I think it's less ambiguous about the key processes that the corporation wants to use. It has also clarified the linkage and traceability between top-level governance and local processes.

I hope this means people will be able to refer to the document in a way that they couldn't before. It will be particularly helpful to refer to in quarterly business reviews, because it not only says what you have to do but in a lot of cases why you have to do it, so it is a lot better

ATHE OPERATIONAL
FRAMEWORK
IS BASED ON
PRINCIPLES OF GOOD
GOVERNANCE, A SET
OF VALUES, POLICIES
AND PROCESSES
THAT GUIDES
OUR WORK AND
BEHAVIOUR, AND
A CLEAR SYSTEM
OF DELEGATED
AUTHORITY
Operational Framework 2006

## Because it's more readable it's easier to understand

## What is the significance of the role the OF spells out for functional councils?

The Functional Councils define and manage the functional policies that the company has, and to give one example of how that will help, you can look at the area of developing personnel. Company-wide there are many people who share a discipline but who actually work all over the place, so we need some sort of functional operation to make sure they all get the right training and development.

The new Operational Framework has made this clearer, and that will help to improve the functional capability of the company at large.

#### Will the OF have an impact on how you personally go about your work? In Naval Ships, we're very focused on high performance, and so anything that develops a culture of high performance

is welcomed here.

It's probably fair to say that we don't like bureaucracy and we like getting on with things, but we do understand the need for us all to adhere to the same governance requirements across the company. Basically, what we want is to ensure consistency across all our



Malcolm Green managing director, BAE Systems Shared Services:

What happens to the OF now within Shared Services? At senior management level in Shared Services.

our key drive now is to weave this new corporate OF into what you might term the bespoke elements of the Shared Services Business Management System, so that we will be able to create a Shared Services-specific OF which can be cascaded throughout the organisation. Incidentally, what we are going to call this document has not been finalised yet, although Shared Services OF has to be an obvious front-runner.

Obviously, the Shared Services OF won't duplicate all the information that is contained within the corporate Operating Framework, but it will overlay it with things that are specific to us, whether it be expenses policies or other things which are part of our governance as to how we do things.

We aim to have that job finished by the end of this year.

Will there be any changes in your business as a result of the new OF?

## It will help everybody understand how it is all joined up

The OF will help everybody understand how everything is joined up. The concepts of integrated business planning, life-cycle management, mergers, acquisitions and disposals, performance centred leadership and performance management – I think a lot of people think these processes are all shut away in their own silos, and what this document does is show how they are all joined up. It will help everybody to understand our structure, and how policies and processes are all joined together.

Apart from everything else, it is incredibly useful to have the actual organisational structure of the company laid out, with things like who the line leaders are spelled out.

THE COMPANY'S VISION AND VALUES FORM THE BASIS OF THE CULTURE WE WISH TO ACHIEVE - A HIGH PERFORMANCE CULTURE. ETHICAL BUSINESS CONDUCT IS FUNDAMENTAL TO THE REPUTATION AND SUCCESS OF OUR COMPANY. THE COMPANY WILL NOT COMPROMISE ON ITS ETHICAL PRINCIPLES AND POLICIES. THESE PRINCIPLES MUST BE APPLIED IN EVERYTHING WE DO?



Bob Murphy, senior vice-president, finance, and chief financial officer, BAE Systems, Inc.

How is this new Operational Framework an improvement over the

previous versions?

This new document is just so much clearer than what we had before. It's only about a third as long, it has eliminated a lot of redundancy, and for the first time we have a good handle on what is truly required by the plc from a policy and process perspective.

The OF clearly defines what our line of business is, and for the first time it is spelled out just where ownership and responsibility lies when it comes to processes and policies. In the past, we had some policies where it just wasn't clear where the ownership came from or where the authority was and the new document makes that tremendously clear.

Another significant change for me is that the new OF makes very clear who drives policy, and that is the executive committee. It is also now very clear that the business concept we have in this company is that the line organisation will in fact lead the business, and functions are there to support the line in meeting its business objectives.

This OF is a major step in making it much easier for our people to come to work and understand what it is they are supposed to do and how the company operates.

#### Why do you think these changes to the OF were necessary?

The original OF came out in 1999 or 2000, when to give just one example the US business was less than \$2bn. Now, that figure is \$11bn – we've gotten much bigger, the company has changed

# new clarity

**Definitions** 

**Objectives** 

**Implementation** 

**Mandated Policies** 

Governance

Laws, Regulations & Codes of Practice

Operational Assurance

Internal Controls

Risk Framework

Workplace, Community & Operational Environment

**Core Business Processes** 

Management

**BAE Systems Businesses** 

#### Awareness and engagement campaign

The company has embarked upon an extensive awareness and engagement campaign, including a newly-updated website, which staff can access under "know-how" in Connectus, and roll-out events which have been taking place currently throughout the organisation.

"All of this will help us establish more clarity about the roles and accountabilities within our organisation and the governance framework within which we operate, helping us to embed and deliver a high performance culture right across our global company," said BAE Systems chief executive Mike Turner.

#### rational Framework>

## For the first time, it is spelled out just where ownership and responsibility lies

dramatically from what it was, it's a lot more complex. In 1999, the OF quite properly reflected the company as it then was, and it was therefore largely a UKcentred document: this new document is a more global document to reflect the more global nature of the business.

If we are going to get to the next level of performance, it is important that we are really clear about the underpinning culture we want to develop in this company. An Operational Framework says a ot about a company, and this OF really emphasises the need for the values that we believe in and which underpin the company's culture. In a company this big, it's important that that is made clear, and this document does a good job of that, regardless of where you work in the world.

#### What is the next stage in implementing the OF across BAE Systems?

The challenge for BAE Systems now is to take all of the 42 policies, processes and reviews which are identified in the OF and apply the same kind of rigorous review to them that the OF itself has undergone. We need to do more than just update them: we need to look hard at them and make sure they are fit for purpose. If any aspect of these policies, processes or reviews is not clear, if the terminology is not consistent with what we use in the Operational Framework. we're going to have very confused businesses out there trying to do their jobs.

To achieve this, we're going to need a

thorough review that really engages the line businesses, and results in a balanced debate about the way forward. It's important that this process takes place in a manner which lets us get the full benefit out of it. Remember, compliance with the OF has to be certified twice a year, and we have to be able to assure the executive team, the board of the company and the investor community that this is an organisation which is complying with all the requirements of

#### What changes will there be in your business as a result of the new OF?

A big difference is that people will now be truly engaging with the OF and fully understanding its real requirements because it is all so much clearer. This is a document you can simply read and understand. People will have an easier time understanding both the vision and the strategy, because there is now one and only one - "creating sustainable shareholder value by being the premier transatlantic defence and aerospace company". The result is that it is much easier to read that vision and strategy, to understand and internalise it and then to develop business strategies that are more clearly aligned with it. That helps people understand where we are headed as a company.

I should also congratulate the CfPE team for the excellent job they did in preparing this document, which is going to be very valuable to our organisation.

Face-to-face customer perception review processes play vital role in helping to build relationships and deliver business opportunities

#### Performance

Customer Voice (CV) and Customer Perception Survey (CPS), are BAE Systems' face-to-face customer perception review processes.

The CV process is used for all businesses located outside the US, for all customers wherever located, and CPS by US-based businesses for interviewing US customers.

Owned and championed by Marketing & Sales and specifically Mike Rouse, group marketing director, customer reviews are playing a vital role, giving customers opportunities to say what they really think about BAE Systems' and why and are helping to strengthen the company-customer relationships.

Heather Coker, BAE Systems CV manager, said: "These review processes are more correctly seen as strategic change processes and have resulted in significantly improved customer relationships, which have helped BAE Systems maintain a real competitive edge and delivered tangible business benefits."

Building excellent relationships with customers is hugely important to BAE Systems as it drives forward its strategy to create sustainable shareholder value by being the premier transatlantic defence and aerospace company.

In BAE Systems operations across the world. CV and CPS have proven themselves to be reliable mechanisms for eliciting key messages from customers, allowing for the continued development of strategic relationships which directly benefit both the customer and the company.

#### **Delivering value to customers** and shareholders

Although it is difficult to wholly attribute quantifiable benefits to processes such as CV and CPS, there are numerous examples where significant value has accrued to both customers and to BAE Systems, which can be at least partially attributed to the undertaking of (and following through from) a customer review. Examples include:

•CV allowed Regional Aircraft to win significant new business and to identify major cost savings which were passed directly on to its customers. During the process, 67 of Regional Aircraft's customers worldwide were interviewed and the lowest scoring customer subsequently gave the business an order for £11m after a series of top level relationship building meetings. Regional Aircraft's customer services director, said: "That's what the customers remember - that you acted in their best interest.

· CV allowed CS&S to enhance its relationship with the UK Defence Logistics Organisation (DLO). The customer was invited to participate in the action-planworkshops which resulted agreement to pursue activities within jointly agreed partnering themes. Paul Evans, DLO partnering director, emphasised the importance of the initiative and confirmed "that it proved to be highly successful and acted as a catalyst for a renewed approach to our joint engagement, the benefits of which remain important in terms of our relationship and also in terms of progressing business opportunities'

• For CS&S MASS, CV resulted in a 40 per cent reduction in costs on ten-year Tornado GR4 support, and led to more effective and quicker insertion of new Tornado capability at less cost. Other gains came in the Harrier programme, where Design Authority technical support now costs 30 per cent less and is far more responsive. Faster integration of new weapons and software releases has resulted from the introduction of joint working of test and evaluation, and software development.

·CS&S Australia has significantly



## **Really listening** to customers is reaping benefits around the world

enhanced its relationships with key strategic partners as a result of CV. As Harry Bradford, chief operating officer for BAE Systems Australia, said: "CV identified a problem with a particular aspect of the Hawk aircraft relating to the threemonth Lead-In Fighter pilot training course. We made successful resolution of this issue a high priority, with the customer fully acknowledging our efforts."

· Air Systems used CV to check the impact of improvement actions taken since 2002. It confirmed the success of the steps taken, and identified a real desire from customers for a closer and more integrated working relationship, along with providing good opportunities to improve and progress the relationships to mutual benefit. A strategically important customer to Air Systems said the CV process was well received and strengthened relationships, with customers comparing it favourably with the tick-box approach used by other companies.

·Oman was BAE Systems' first overseas CV review. Simon Keith, managing director Middle East, Africa and India, said: "We wanted to demonstrate that the Sultan's Armed Forces are central to our decision-making process and that we aim to promote change in line with their



*<b>4CUSTOMER VOICE* PROVED TO BE HIGHLY SUCCESSFUL AND **ACTED AS A CATALYST FOR A RENEWED** APPROACH TO OUR JOINT ENGAGEMENTY

Paul Evans, UK Defence Logistics Organisation partnering director

Among the direct benefits was the identification of critical support and contractual issues that were barriers to business as well as immediate in-service equipment priority concerns. We have also identified the potential to increase the overall value of the support, new equipment and platform business. During this period, Integrated System Technologies was down-selected for the Global Maritime Distress Safety System worth more than £6m. Simon Keith said: "The findings have helped us better understand our customers' priorities and one really positive result has been how Oman views BAE Systems as its strategic partner going forward."

#### US reviews strengthen relationships and yield immeasurable results

In the US, CPS has entered its fourth year. Executives throughout the com-pany have met more than 350 key US customers and have learned of their most significant challenges and their expectations for BAE Systems. The interviews and the follow-up have improved the company's relationships across many fronts and have provided many new business opportunities

The 2006 CPS is focusing on the effects of the newly-organised company and the integration of the former United Defense. In addition, the process is allowing the operating groups to use the CPS as a way of branding the company in strategic markets such as information technology and intelligence.

Mark Ronald, president and chief executive officer of BAE Systems, Inc., serves as the executive champion of CPS.

"The practice of conducting reviews with our customers has taken on a global approach. The CV and CPS processes provide our executives the tools to interact with our customers at many levels," said Mark.

"The reviews have strengthened our customer relationships and yielded immeasurable results across the board; most importantly by instilling a culture of listening and reacting to our customers. Feedback has been positive and over time will strengthen one of our key values - Customer - by better understanding our customers and meeting our commitments to them."

For more on CV contact BAE Systems Customer Voice manager heather.coker@baesystems.com For more on CPS contact BAE Systems CPS manager. Email: susan.lenover@baesystems.com

## 'Fantastic' Nimrod praised by MOD

Delivering value

The UK Government has signed a production contract with BAE Systems for a 12-aircraft fleet of the next-generation Nimrod, the MRA4, successor to the inservice Nimrod MR2. This number includes the later conversion of the three development aircraft to the production standard.

Two weeks after the deal was announced by the Secretary of State for Defence Des Browne at Farnborough International Airshow 2006, VIP personnel from the UK Ministry of Defence (MOD) flew on the aircraft for the very first time and were full of praise for

Contract signed for 12-strong fleet of next-generation MRA4 aircraft

the aircraft's performance, capability and huge step change from the MR2 variant currently in RAF service.

Lieutenant General Andrew Figgures, Deputy Chief of Defence Staff (Equipment Capability), and Air Vice-Marshal Stu Butler, Capability Manager (Information Superiority) were on board development aircraft PA3 for a one hour flight from our Warton site.

ight from our Warton site. Interviewed after the flight,



General Figgures said: "All those who contributed to this aircraft can be very proud of what they have achieved. We will have a very effective piece of equipment which will be developed over the years, and provide us with tremendous capability."

Air Vice-Marshal Butler, who also flew the aircraft for part of the flight and who has had previous experience on Nimrod MR2s, was equally enthusiastic: "This aircraft's a giant leap forward from the MR2 – it's fantastic. It's great to be back on Nimrod again, and great to see such a wonderful aeroplane – it has so much power, and just bristles with potential."

After the announcement at Farnborough, Mike Turner, BAE Systems chief executive, said: "The new Nimrod MRA4 is a world leader in terms of maritime patrol platforms and will give the UK at least 30 years of adaptable capability in maritime reconnaissance and attack operations.

"The aircraft has the potential to fulfil a number of important strategic roles for the Royal Air Force.

"The Nimrod programme has also broken new ground in terms of the close working relationship that was formed between Air Systems and our customer—and we have learned some valuable lessons in project management that are now benefiting the whole of our business."

Key to winning the customer's confidence has been the company's steady progress since 2003 on design maturity and the preliminary work that has been

**≰IT'S GREAT TO BE ON NIMROD** 

AGAIN ... IT HAS SO MUCH POWER,

AND BRISTLES WITH POTENTIAL?

done on the through-life support programme, a vital element in ensuring a smooth transition from the in-service Nimrod MR2 fleet to delivery of the new MRA4 to the front line.

Underlying our ability to enhance military capability, availability improvements on the MR2 fleet produced under the Nimrod Integrated Support Contract (NISC) with BAE Systems CS&S MASS have released airframes to be removed from service for conversion

to MRA4 without affecting operational requirements.

A comprehensive fiveyear partnered support proposal, which will detail management of the RAF's transition from the in-service Nimrod MR2 to the new MRA4, is being prepared for submission to the UK MOD in 2007.

The UK MOD has also awarded a £65m extension to the current NISC to CS&S. The contract amendment sees CS&S incentivised to ensure availability of the current Nimrod MR2 fleet to the front line and extends the term of the original contract from 2008 to the aircraft's out-of-service date of March 2011.

# Naval Ships delivers 'the best yet'

Enhancing capability

BAE Systems has handed over Cardigan Bay, the latest Landing Ship Dock (Auxiliary), to the UK Ministry of Defence,(MOD) which has called it the best yet.

Tony Graham, leader of the MOD's LSD(A) integrated project team (IPT), said the ship was the best of the class so far delivered. He was speaking during formal acceptance of the ship, which took place at BAE Systems' Govan site in Glasgow on 3 August, more than six weeks early to programme.

BAE Systems Naval Ships managing director Vic Emery said: "This significant milestone in the LSD(A) programme demonstrates Naval Ships' ability to efficiently deliver the capability our customer needs, and a great deal of credit is due to everyone who was involved in building and integrating this magnificent ship."

Cardigan Bay follows sister LSD(A)s Mounts Bay and Largs Bay in being accepted by the Royal Fleet Auxiliary, whose Commodore, Cdre Bob Thornton, was the senior MOD representative at the ceremony.

The fourth and final ship in the class, Lyme Bay, is currently being completed at Govan.

Meanwhile, link-up of the bow section of the second Type 45 destroyer, Dauntless, with the block containing the forward machinery space and ops room, is on target for completion in early October. That will see the ship's hull form complete on the Govan berth

Erection of the superstructure is also well under way, with two units in the hanger area making good progress and the remaining units to be delivered in October.

All the learning from the first two ships is having a dramatic impact on



Above: Naval Ships managing director Vic Emery formally hands over the Landing Ship Dock (Auxiliary) Cardigan Bay to Commodore Bob Thornton of the Royal Fleet Auxiliary. Below: Cardigan Bay leaves the Clyde

progress of the third ship, Diamond.

Achievements in outfitting levels and timescales are demonstrating good performance.

The diesel generators for the first ship, Daring, have been turned over for the first time, ahead of the destroyer's next major milestone of diesel generator trials.

They were fired up and turned over under local control, rather than through the ship's platform management system, to check that sea suction pumps and related equipment are working pending the full generator trials.

These will be followed by starting up the main gas turbines, heralding several months of work, which will in turn pave the way for the start of stage one sea trials in the middle of next year.

BAE Systems will work in partnership with Malaysian ship yard Labuan Shipbuilding to build two Jebat class frigates for the Royal Malaysian Navy. The ships will be fitted with state-of-the-art systems that will be fully interoperable with current RMN frigates.



# New UK law bans discrimination on grounds of age

**Equality legislation** 

New Government regulations making it illegal to discriminate against workers on the grounds of age apply to all BAE Systems operations in the UK.

The Employment Equality (Age) Regulations, which came into force on 1 October 2006, cover anyone in employment or vocational training and are the final step in a series of anti-discrimination measures which have already covered race, sex, disability, sexual orientation, religion and belief.

religion and peller.

The regulations affect a wide range of employment issues, such as recruitment, terms and conditions of employment, promotions, transfers, dismissals, retirement and training.

Under the new laws, age discrimination in recruitment, promotion and training is banned unless objectively justified The default retirement age is now 65, for both men and women, and it is unlawful to require earlier retirement, unless a lower age can be objectively justified.

Pension schemes are generally unaffected by the regulations, and staff can still retire and draw their pension subject to the rules of the scheme they are in.

Employees can now ask to work beyond retirement age, and employers must give at least six months' notice to employees about their intended retirement date.

The regulations cover both direct and indirect discrimination, along with harassment and victimisation. An example of unlawful direct discrimination would be to treat someone less favourably than someone else because of their age.

Employees who feel they are being discriminated against should raise the matter in the first instance with their line manager.

If they are unable for good reason to do this or are not satisfied, they should then raise the matter with their local HR department. If this is not resolved at this point, employees can then raise the matter through the appropriate business grievance procedure, ethics hotline or RAW procedure.

Further information can be found at: https://peopleportal. togethr.com/cms/dynamic/ baepage1311.jsp

## THE CLASS SO FAR DELIVERED Tony Graham, leader of UK MOD's LSD(A) integrated project team

**4**CARDIGAN BAY IS THE BEST OF

### Get a grip with gecko power

Technological Innovation

What drives a gecko lizard up the wall? The answer lies in an amazingly complex surface texture on the creature's toes that can grip fast to the smoothest of walls – even to glass.

Scientists at BAE Systems' Advanced Technology Centre (ATC) in the UK have probed the gecko's secrets and have recreated their own version of lizard sticking power: an artificial surface that grips tightly without glue or pressure. The results have

The results have aroused interest across BAE Systems and a number of external businesses who have suggested applications in both the defence and commercial business sectors.

The gecko's ability to scurry up vertical walls and windows has bemused people for centuries. The reptile's antics have inspired flights of fancy such as familiar wall-climbing comic book characters.

So how does the lizard grip so tightly yet still have the freedom to move? It was once thought that miniature vacuum suckers

were at work, but the answer turns out to be much more complicated. The soles of each of the gecko's feet are patterned with millions of tiny hairs with "split ends". At the tip of each is a mushroomshaped cap less than one-thousandth of a millimetre across.

These microscopic features ensure that, whatever the roughness underfoot, the lizard's toes are always in very close contact with the surface beneath – so close that molecular forces of attrac-

tion create the grip. The grip is released by a peeling action when the animal lifts its foot, which breaks the bond. The attractive

force for each hair is tiny but when multiplied by a few million for all four of the animal's feet there is more than enough grip to support its weight.

And yes...it has been calculated that if human palms were covered with the same

material, they

could support an average person's weight. Recognising that such bonding power could have tremendous engineering potential, ATC scientists set out to make their own version of the gecko foot.

Some of the applications suggested by BAE Systems businesses include instant repair patches for holed structures (such as fuel tanks and aircraft skins), access panels without fasteners, rapid attachment of armour or stealth panels to platforms, improved crawler robots, personal safety harnesses, new building materials and even the tethering of aircraft to carrier decks.

Using their micro engineering clean room facilities, the ATC has created layers comprising thousands of microscopic stalks with splayed tips closely resembling the mushroom-headed gecko hairs. The strength with which these polymer layers stick to glass has been measured using a purpose built balance.

A pull-off force of 3,000kg per square metre has been measured. This means that a sheet of this artificial gecko material just over 60 centimetres square could be used to suspend the weight of an average family car.

"We have very quickly been able to make artificial gecko bonds as good as any one has managed so far," said Jeff Sargent, materials specialist at the ATC. "We believe the process can be tailored to suit a range of applications depending on the kind of re-adhesion properties needed. We can't quite imitate the gecko yet in coping with a range of different surface roughness – more work is needed – but we believe our fabrication method can be scaled to achieve this far more readily than methods tried by others."

Jeff and his colleagues already have an eye on possible future enhancements which could lead to a gripping force that can be controlled and varied at will to create and release bonds without moving the surfaces, outperforming even the athletic gecko.

For further information, contact: jeffrey.sargent@baesystems.com sajad.haq@baesystems.com



## **Highlight of missile test**

A Terminal High Altitude Area Defense (THAAD) missile is launched (left) at White Sands Missile Range, New Mexico, and intercepts its target missile (right) just inside the earth's atmosphere.

The test in July incorporated all of the THAAD system's components, including the launcher, radar, fire control and communications, and its interceptor. A key objective of the test was to demonstrate the BAE Systems

Electronic & Integrated Solutions (E&IS) interceptor seeker and its characterisation of a ballistic missile target, including its ability to acquire and track an incoming ballistic missile target.

"It was amazing to witness," said John Watkins, E&IS programme manager who attended the launch. "The missile left a vapour trail that led to a large target destruction cloud illuminated by the rising sun."

The THAAD missile uses

hit-to-kill technology to destroy short, medium and intermediate range ballistic missiles that can carry weapons of mass destruction. It was designed to provide layered coverage and operate in concert with the lower-tier PAC-3 Missile system. The THAAD programme is managed by the Missile Defense Agency in Washington DC, and executed by the THAAD project office in Huntsville, Alabama. Lockheed Martin is the prime contractor.



## New course to help win business

Knowledge sharing

Analysing the reasons for the success or failure of a major bid can provide a goldmine of information to help ensure future bids are successful.

A new training course developed by BAE Systems' UK Business Team gives staff a chance to learn lessons from previous bids that can help them win business from the UK Ministry of Defence (MOD).

The MOD business winning course draws on the work of the UK Business Team which has to date undertaken detailed reviews of 12 major bids, in which more than 60 lessons for the future have been identified.

To ensure that information was widely available, the MOD business winning handbook was developed and made available on the intranet and quickly became much more than a simple mechanism for communicating the lessons learned. With more than 300 registered users, it has grown into a wide knowledge base for the UK business-winning community.

The new one-day course is designed to accompany the handbook, and gives participants the chance to understand and gain experience in exploring and developing material

from the handbook. It also involves working on case studies which focus on important lessons identified in bidding to the MOD.

Both the course and handbook build on the material delivered through the LCM business winning practitioners course and guides.

The new course maximises learning through a balance of taught input, case studies, syndicate activity and discussion. The course, which is delivered on-site or at a suitable local conference venue, is aimed at members of the business winning community, across all functions, who are pursuing opportunities with the UK MOD.

The course has so far been run three times, and the plan is to continually improve the content based on feedback comments and to keep the content up to date to reflect the rapidly changing MOD environment.

Plans are also in place to significantly update the handbook to reflect the major changes resulting from the Defence Industrial Strategy and the Defence Acquisition Change programme.

Courses can be booked through Peopleportal. For more Information contact: nigel.e.cudby@baesystems.com

## MOD takes delivery of first of new Bulldogs

AVF transformation

BAE Systems has delivered the first 50 Mk3 FV430 armoured vehicles, now renamed "Bulldog", to the British Army on time, meeting a key milestone.

This upgrade programme continues to demonstrate that we are transforming our armoured fighting vehicle business to be the throughlife capability partner for the British Army.

The delivery programme has now accelerated to 20 vehicles per month with all 500 vehicles scheduled to be delivered to the customer by October 2008.

Land Systems was awarded the contract, valued at £80m, in October last year to upgrade the powertrain of 500 FV430s for the British Army. This is a flagship programme for Land Systems and is at the forefront of the UK Government's Defence Industrial Strategy.

In addition to the powertrain contract, Land Systems has also been awarded a contract, in response to an Urgent Operational Requirement to further up-armour a number of Bulldogs for the British Army to satisfy its immediate military requirement.

The powertrain work involves the upgrade of the engine, transmission, transfer box, electrical installation of the system, braking system and associated cooling group for the FV430 vehicles.

## Milestone for FV430 armoured vehicle upgrade

It takes about 30 days to upgrade each vehicle to the Bulldog and Land Systems has entered a partnership with ABRO (Army Base Repair Organisation) to undertake the conversion work at its facility at Bovington in the south of England.

Ian Mogey, FV430 integrated project team (IPT) leader, said that he and his team were learning valuable lessons from this upgrade programme.

He also acknowledged the demanding role of his supply chain managers with the programme involving about 25 individual suppliers.

"It is essential for the success of this programme that our suppliers deliver a quality product, and on-time delivery is fundamental for us to meet the challenging timescales required of us by the customer."

The third element of the IPT's work is an in-service support contract for the Powertrain elements of the Bulldogs.

This contract, which was placed in April this year for £13m, will provide the customer with seven years of continued support and reliability guarantees on the Bulldogs

## Spotlight>



Above: after the handover of the first of six Hawk Advanced Jet Trainers to the Royal Bahrain Air Force, His Highness Sheik Salman bin Hamad Al Khalifa (centre), Crown Prince of Bahrain and Commander in Chief of the Bahraini Defence Force, inspects his new aircraft with Hawk managing director Mark Parkinson and RAS Systems test all of Not Malkaneage.

## A show of success

**Building relationships** 

This year's Farnborough International Air Show in the UK was the hottest ever in every sense of the word.

Despite the soaring temperatures, the show was big success for BAE Systems and has been hailed as the best ever in terms of access to customers, delegations and media. The company pavilion included various hospitality facilities and showcased the company's full range of capabilities across land, sea, air and information domains.

During the week,we received more than 3,000 visitors, as well as more than 90 VIP delegations from 40 countries.

The delegations included royalty from Middle Eastern countries such as Bahrain and Oman, the Deputy Prime Minister of Malaysia and other senior government ministers from around the world.

We also hosted a number of US delegations from all services, including Jeb Bush, the Governor of Florida, and dignitaries from the UK such as the Secretary of State for Defence, Minister of Defence Procurement, Chief of the Air Staff and other members of the Ministry of Defence Select Committee.

Farnborough International Air Show also afforded a suitable stage for a number of

ATHE BAE SYSTEMS PAVILION RECEIVED MORE THAN 3,000 VISITORS AND MORE THAN 90 VIP DELEGATIONS

important announcements and events. These included a press event led by the UK Secretary of State for Defence Des Brown announcing the Government's decision to award BAE Systems a production contract for a 12 aircraft fleet of Nimrod MR4As, and a ceremony to mark the delivery of the first of six Hawk aircraft to the Royal Bahrain Air Force which was attended by His Highness Sheik Salman bin Hamad Al Khalifa, Crown Prince of Bahrain and Commander in Chief of the Bahraini Defence Force.

The BAE Systems pavilion provided an ideal facility to promote the company's capabilities, host a number of important meetings and lunches with existing and potential customers, watch the flying displays and look after the media all under one roof.

#### UK ethics awareness training

Performance

Behaving ethically in business is an essential part of working for BAE Systems, and must be integrated seamlessly into everything we do.

The Employee Ethics Survey carried out in the UK in May 2005 showed that more than 88 per cent of UK employees considered BAE Systems to be ethical.

However, the results also highlighted that the company still has work to do in communicating its ethical policies and giving employees information on ethics issues, and in particular, the Ethics Helpline.

After reviewing these findings, the company took the decision to introduce an online ethics awareness course that will be mandatory for all employees in the UK. This has been adapted and is aligned with the training course that has already taken by all BAE Systems employees in the US.

The course, which provides clear links to the "Ethics and You" materials and the ethics helpline, will be available both online and through classroom training and takes the form of a single ethics module which looks at:

• what is business ethics and why is it important to

 why following the law isn't enough

 examples of ethics in the workplace

• mandatory quiz.

The company is now rolling out the training course across the UK business. You will be advised by your business when the course is to become available to you.

## E&IS wins \$96m laser-guided rocket contract

Providing capability

The US Army has selected Electronics & Integrated Solutions (E&IS) as prime contractor for the Advanced Precision Kill Weapon System II (APKWS II) programme.

The company received a \$96.1m system development and demonstration (SDD) contract in April to provide APKWS II laserguided rockets. The contract is a two-year agreement with options for low-rate initial production in 2007

"I appreciate the hard work of all those who participated in this effort to complete the source selection and award the contract," said the US Army APKWS II product manager, Richard Paul. "We will continue to focus on ensuring a rapid fielding of this affordable, guided rocket to the Army aviation forces. It is a weapon system they want and need."

APKWS II adds precision targeting to currently unguided Hydra-70 2.75-inch rockets.

The Hydra rocket is widely used by the US

Armed Forces. With the APKWS update, the rocket will be transformed to a low-cost, light-weight guided weapon that is effective against soft or lightly armoured targets, and is well-suited to urban operations.

BAE Systems is partnered with Northrop Grumman and General Dynamics. The system will be used on Army and Marine Corps aircraft that use the Hydra 70 rocket.

"The BAE Systems team put together a solution that keeps the war fighter's needs uppermost. Our design approach satisfies the need for a low-cost, low-collateral-damage precision rocket," said Frank Wilson, director of Precision

**≜**OUR TEAM LOOKS FORWARD TO WORKING WITH THE ARMY TO GET THIS CAPABILITY TO THE FRONT LINE AS QUICKLY AS POSSIBLE ■

Targeting for BAE Systems at Nashua, New Hampshire. "Our team looks forward to working with the Army to get this capability to the front line as quickly as possible."

Frank said the Sensor Systems line of business would provide the first production baseline units for evaluation prior to critical design review.

## Going for gold in Chairman's Awards

Recognition and reward

The 2006 Chairman's Awards judging process is well under way.

This year we received more than 3,000 nominations to recognise some 17,000 employees from BAE Systems businesses around the world. Congratulations go out to the bronze award-winning individuals and teams.

In his video message to bronze winners, chairman Dick Olver said: "These nominations have been judged to be among the best in our business. The ideas, actions and behaviours

demonstrated help BAE Systems deliver Real Advantage to our customers, and for this I congratulate

Silver award winners were announced in September and will be invited to events in London on 30 October and in Washington DC on 1 November. These silver winners are recognised in the insert with this edition.

Of these, a total of 18 silver award winners will go forward to the gold judging panel on 14 November. The gold awards ceremony will be held the following evening at the Steven F. Udvar-Hazy Center, part of the National Air and Space Museum in Washington, DC, where two gold winners will be announced in each of the three categories.

Dick Olver said: "I feel very strongly about the power of Innovation, Transferring Best Practice and Enhancing Customer Performance to make BAE Systems an even better company."

And when it comes to enhancing customer performance, it doesn't get more real than improving the availability of aircraft to the front line at significantly reduced cost. One of last year's Gold Award winners



Above: the gold-winning JUMP team

was the Joint Upgrade & Maintenance Programme (JUMP) team who have reinvented the support environment.

As well as handling a complex regular maintenance programme for the Harrier in record time, JUMP is also responsible for upgrading the Harrier from its current GR7 version to the new GR9 standard.

This includes new smart weapons, major avionic systems re-design for the replacement of a large number of avionic units and a re-write of 200,000 lines of software code controlling the avionic and weapons systems. The design changes have also resulted in major airframe changes and rewiring of the aircraft

with over five miles per air-

#### **4THESE NOMINATIONS HAVE BEEN** JUDGED TO BE AMONG THE BEST IN OUR BUSINESS!

craft removed or replaced. The GR9 conversion has also included the necessary "marinisation" changes required for prolonged carrier operations'

The UK Ministry of Defence (MOD), JUMP's customer, has called it "a most impressive success story"

So how has the team performed since the gold win

JUMP has now been operational for 18 months, with 13 aircraft having been returned to service in line with baseline targets. This delivery allows the customer to declare the GR9 in-service date at the end of

September 2006, a date that was set four years ago. This event will be celebrated by the MOD at RAF Cottesmore. Since its inception JUMP has reduced turnaround time from 52 weeks to 32 weeks. There has been a 50 per cent reduction of out-of-action aircraft each year and a £44m saving in maintenance

Don't forget. Nominations for 2007 can be submitted at any time. There is no need to wait until next year - visit the Chairman's Awards website to find out the name of your co-ordinator and give your team a JUMP start!

**Feather** 

in their

caps

Celebrating success

BAE Systems took home two Gold Quills from the 37th Annual International Association of Business Communicators (IABC)

2006 International

The BAE Systems, Inc.

communications team,

won for its communica-

tions campaign during

the concurrent reorgan-

the integration of

United Defense and

isation of the North

team, led by Jeff Van

Muktarian of Land &

nised for its work in

creating an electronic

press kit on portable

USB pens for trade

Armaments, was recog-

America business. The second winning

Keuren and Herb

led by Bob Hastings,

Conference in

Vancouver.

## **Employees** voice their opinions

Performance

BAE Systems conducted its global Employee Opinion Survey (EOS) in April. More than 45,000 employees, over 64 per cent of the workforce, took the opportunity to respond and tell us what they felt had improved since the 2004 survey and what they would do if they ran the company for a day.

The greatest areas of improvement focused on the areas of Career Development and Rewards, Trust in Leadership and Engagement.

Employees who responded to the survey felt the company was providing them with not only the development opportunities they wanted, but also training, access to the tools and information that they need to do

Employees' view of the leadership population has also improved, with confidence in the job being done by senior management increasing from 2004 scores, along with senior managers' ability to motivate the workforce to perform at a high level. We now need to continue the good work in reinforcing good performance by providing tools and information to help people do their jobs,

but to also enhance future performance by continuing to provide training, learning and development opportunities for all employees.

The survey also highlighted areas that the company needed to improve upon. The main area for improvement focuses on how poor performance issues are addressed.

Employees specifically requested more training on performance management techniques, improved communication on what both good and poor performance management means, and clearer differentiation of pay and reward against performance.

Performance management has been the subject of an HR working group which will continue to review and address these issues. We are committed to improving both actual performance management and employee awareness of how we address this issue. We will be providing regular updates on progress and

greater clarity on this issue. Individual EOS results have now been communicated back to business units/operating groups in order for them to develop action plans to address issues that have been highlighted in their survey



## **Education hits the road**

**Community links** 

As part of the company's continual commitment to promoting careers in engineering, the BAE Systems' Education Programme has hit the road on its autumn tour of the southern UK.

The tour, which kicked off at schools close to RAF Cottesmore and RAF Marham, will run throughout the autumn term ending in Wales, close to the com pany's Glascoed site, in November.

The programme takes in more 50 schools close to BAE Systems sites. During the road show, three actors from a theatrical communications company, CragRats, perform a 30-minute play challenging young people's prejudices about careers in engineering, and introducing them to the exciting possibilities and opportunities that studying science, mathematics and related subjects can provide.

This is followed by a workshop exercise, aligned to national curriculum design and technology objectives, which asks the participants to design an air, land or sea

Richard Hamer, education partnerships director

vehicle with a particular task

The road show will be supported by BAE Systems' Science and Engineering Ambassadors (SEAs). A network of nearly 400 volunteers enables employees to visit schools local to their sites to share their enthusi-

asm for engineering. The programme was initiated in response to industry and government concern about declining interest in science and engineering

among young people. It was launched in March 2005.

"BAE Systems recognised a real need within the industry to encourage young people to see engineering as a viable and stimulating career option and developed a complete range of education programmes at all stages of schooling." education partnerships director Richard Hamer explained. "This particular programme builds on the company's traditional links with schools across the UK and through it we hope to stimulate interest in engineering in young people as they move into secondary school.'

shows and other These two Gold Ouills are true marks of distinction for our communications team members," said Hastings, BAE Systems, Inc. vice-president of public affairs and

communications. "I am very proud of the world-class work we accomplished last vear - these teams remained focused on our employees and our customers as we transformed BAE Systems in the US and globally.

"Perhaps more importantly, we are investing in our future by having team members particpate in organisations like



Above: Gold Quill awards

**▲BAE SYSTEMS RECOGNISED A** REAL NEED WITHIN THE INDUSTRY TO ENCOURAGE YOUNG PEOPLE!

## Top supplier awards in US

Three Electronics & Integrated Solutions (E&IS) lines of business have been recognised by the Defense Supply Center in Richmond, Virginia, as the US Government's best suppliers for successfully meeting the Defense Logistic Agency's (DLA) requirements for on-time delivery and product quality in 2005.

The Electronic Warfare (EW) line of business at Nashua, New Hampshire, and the National Security Solutions (NSS) line of business, at San Diego, California., both received

gold awards from commander of the Defense Supply Center, US Navy Rear Admiral Mark Heinrich, at an aviation supply chain conference in

E&IS's Platform Solutions line of business earned a bronze award.

To determine eligibility for

the award, the Defense Supply Center uses a best value computerised system that collects vendors' past performance data and translates it into a numeric score. ranging from zero to 100. To qualify for a gold medal, the contractor must have had a perfect score of 100. A score between 98.0 and 98.9 warrants a bronze medal. Radio Frequency

Electronic Warfare provided about \$4m in spare parts to The Defense Supply Center in 2005. These spare parts support the ALR-56C, ALR-56M Radar Warning Receivers (RWR) and ALQ-131 Receiver Processor (RP) hardware. These parts support various depots in the US and around the world.

NSS, for the 13th consecutive year, received the gold

award for providing nearly \$500,000 of spare assemblies to support F-16 avionics testers and B-1 test equipment at various depot locations

BAE Systems' Land & Armaments operating group was also awarded a bronze award for supplying more than 600 different weapon system repair parts to various DLA locations in support of the company's tracked armoured vehicles.