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Among the Boeing aircraft serving the UK Ministry of Defence is the Apache helicopter.

By Maribeth Bruno and Madonna Walsh

special relationship"—British Prime Minister Winston Churchill coined that term to describe his country's history of military and economic cooperation with the United States. He said the countries' close ties required not only "growing friendship and mutual understanding" but also "common study of potential dangers," similar weapons and joint use of military bases.

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Since Churchill's time, the United States and United Kingdom have continued to maintain their "special relationship" as the world's No. 1 and No. 2 defense markets. Boeing has been active in the United Kingdom for just as long, from the country's purchase of North American's Harvard trainer aircraft in 1938 to this year's reorganization of Boeing's UK defense businesses under the umbrella of Boeing Defence UK. Boeing will formally introduce BDUK this month at the Farnborough International Airshow, which takes place in the United Kingdom—a nation where Integrated Defense Systems sees up to \$7 billion in business opportunities over the next decade.

"Boeing sees the United Kingdom as a source of highly skilled suppliers and partners as well as a valued customer," said BDUK Managing Director Mike Kurth. "Bringing together IDS businesses as part of a single UK entity positions us for growth by streamlining our infrastructure, building a cohesive, local strategy and demonstrating our continued commitment to UK stakeholders. BDUK is also the foundation of our response to the Ministry of Defence's Defence Industrial Strategy."

Boeing employees already have noticed how this streamlining is

111 the UK Boeing's UK defense operations realign for growth and customer support

making a difference. "[BDUK] has been very effective in opening up communication between the various IDS groups in the UK," said Roland Perez, who manages the U.S. T-45 Supplier Program under which BAE Systems manufactures about 80 percent of the T-45 trainer's bill of material. "It comes in handy knowing about other Boeing resources throughout the country."

The Defence Industrial Strategy (DIS), launched in 2005, calls for retaining certain industrial capabilities within the United Kingdom to protect national security, develop intellectual property, and create jobs across a wide range of skills. It asks suppliers to make commitments in areas including through-life support, systems engineering, and innovation/ research and development, and to "create value, employment, technology or intellectual assets in the UK and thus become part of the UK defence industry." Lt. Gen. Andrew Figgures, Ministry of Defence Deputy Chief of Defence Staff (Equipment Capability), put it in even plainer terms: "To me, it means commitment. It means you are investing in our future."

That's just what BDUK is doing across the country, with a variety of products and services.

FRES: A FOOTHOLD FOR EXPANSION

One of several milestones on the way to a single BDUK was the opening of a new facility in Bristol in April 2007 in support of IDS Combat Systems' contribution to the Future Rapid Effect System program. In October, the Ministry of Defence awarded Boeing and partner Thales UK the program's initial System-of-Systems Integrator contract. FRES will provide the British Army with a family of mediumweight, network-enabled, air-deployable armored vehicles to meet up to 16 roles.

"Establishing a base, setting up a longterm partnership and developing intellectual property onshore were key factors in the FRES win," said Jonathan Bailey, deputy director, BDUK Bristol.

Combat Systems UK Director Jim Freeman added that Boeing's actions fall into an essential category of the Ministry of Defence's evaluation: behavior. "We need to understand, act like and actually be a UK company that understands how the Ministry of Defence and industry do business, and bring the best of Boeing together for our customer," he said.

"Successfully executing this program will position us to expand our capability in the UK and European defense markets," Bailey concluded.

THE PORTAL: A GLOBAL RESOURCE

The Portal, a Farnborough-based joint effort between Boeing and UK defense technology firm QinetiQ, officially reaches its first anniversary this month. But it was providing programs with modeling and simulation services for months before its opening ceremony. In fact, the Portal team directly contributed to the FRES contract win by using its simulation environments to help explore battlefield scenarios.

"The Portal is a central resource for all BDUK and IDS activities in the UK," said Boeing Technical Fellow and Portal Facility Director Shane Arnott. "Any program can request support, from a simple presentation to a large experiment that links facilities across the UK, the United States and Australia.

"The DIS is very specific about the need for industry and the Ministry of Defence to engage earlier in the systems-development process," Arnott continued, "and its companion document, the Defence Technology Strategy, makes dozens of references to the need for simulation and synthetic environments to aid decision making. The Portal is the answer to those calls from the customer."

Arnott, who is Australian and set up a similar capability for Boeing Australia Limited, is pleased that when he moves to a new assignment in August, he will be succeeded by a "local"—Portal operations analyst John Winskill, a former British Army officer. "Another way we can build our presence here is by placing highly qualified UK citizens in leadership positions," Arnott said.

SUPPORT—AND IMPROVEMENT

BDUK's activities in the United Kingdom involve not just product development but also support for existing assets.

• IDS Support Systems Integrated Logistics, partnering with major subcontractor Vector Aerospace (formerly the Defence Aviation and Repair Agency), has committed to keeping 27 of the 40 UK Chinooks available to the front lines at all times. Just two years into the 34-year Chinook Through Life Customer Support program, the team is exceeding performance indicators for both availability and mission capability.

Program Director James O'Loughlin credits widespread sharing of best practices in Lean and Employee Involvement with the program's cycle-time reductions. "We work with our customer, with Vector and with the Boeing Rotorcraft team in Philadelphia to make improvements that will return Chinooks to service as quickly as possible, while reducing overall maintenance costs," O'Loughlin said.

• Boeing delivered the Royal Air Force's sixth C-17 Globemaster III on June 11. The new airlifter was a welcome addition to a hardworking fleet that supplies the "air bridge" to Afghanistan and Iraq. Since the first

RAF C-17's operational debut in 2001, the aircraft have been used at about 120 percent of their originally planned flight hours per year.

Supporting that punishing schedule is the job of the C-17 Globemaster Sustainment Partnership (GSP)—a contract between Boeing and the U.S. Air Force that the United Kingdom takes part in through a Foreign Military Sales agreement. Boeing field service representatives work on-site at RAF base Brize Norton.

"Our engineers' postproduction product review authority means repairs can take place right on-site, which saves time and keeps C-17s in the air," said Boeing C-17 Field Services Manager Trevor Kirby.

• The Boeing team in Yeovil, England, and Mesa, Ariz.—working as a contractor to Britain's AgustaWestland—provides a full range of support services for the British Army's fleet of 67 Apache helicopters. British Army Air Corps Apaches are forward-deployed from Wattisham Air Field in the UK in support of NATO-led operations in Afghanistan. Aviation Training International Limited, a joint venture between Boeing and AgustaWestland, provides crew training services.

"The Boeing technical staff and management team are located in the same building as



Through the Chinook Through Life Customer Support program, Boeing is maintaining the United Kingdom's fleet of Chinook helicopters. NICK WEST PHOTO

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the Ministry of Defence, AgustaWestland and other industry-alliance partners," said Technical Support Services and Yeovil Site Manager Don Brubaker. "So the lines of communication are excellent—we understand our customers' needs, and they see us as listening and responding appropriately."

Program Manager and Capture Team Leader John Wilson said his team is working on a Future Support Arrangement that will transition the program into a long-term, Performance Based Logistics solution similar to Chinook TLCS. "We're also working closely with BDUK and others to share lessons learned and exploit economies of scale," Wilson added.

The BDUK support team for the RAF's fleet

of seven E-3D Airborne Warning and Control System (AWACS) surveillance/command-andcontrol aircraft also is located close to its customer, on base at RAF Waddington. Boeing completed the seven deliveries in 1992, but its support began with predelivery preparations and continues today with postdesign services. The team has completed an upgrade of the fleet's radar capability and installation of the Global Positioning System/Inertial Navigation System.

The Ministry of Defence continues to review potential enhancements to maintain interoperability with AWACS fleets in the United States, NATO, France and Saudi Arabia. BDUK stands ready to provide whatever support is required. "Clearly, we're in it for the long haul," said Boeing Field Support Manager Brad White.

BDUK's efforts such as the ones listed above are already attracting notice, said Air Vice-Marshal Stuart Butler, Capability Manager (Information Superiority). "You've now got an increased presence in the country and you're very much becoming part of the UK infrastructure," he said. "We're delighted to see that particular buildup is increasing.

"We're in this game to win," Butler added, "and we can only do that by working together."

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The Portal, a joint effort between Boeing and QinetiQ, is a high-tech decisionsupport facility that provides modeling and simulation services.

The same language:

Creating BDUK

The Portal Official Open

The task was clear: Bring together the dispersed operations and employees working on Integrated Defense Systems projects in the United Kingdom to present a single Boeing Defence United Kingdom face to stakeholders. As it happened, this transformation is occurring at a time when Shared Services Group, Information Technology, Human Resources and Finance are working to enhance their international operations.

The administrative transition is progressing on schedule, with all affected operations and employees expected to move officially into the new organization early this month. IDS' nearly 170 UK-based employees stay informed via a new intranet site and a monthly all-hands teleconference and webcast.

"We want to be sure that when we align everyone into Boeing Defence UK there are no disruptions to the level of service employees receive and expect," said BDUK Managing Director Mike Kurth. "The alignment also simplifies compliance and other legal concerns—reducing the number of audits, for example. We're working closely with the SSG team to streamline the infrastructure services that support our operations."

"SSG's goal is to help BDUK run its business without having to worry about the infrastructure," said Russell Geen, business manager of the Boeing St. James London office, where BDUK is headquartered. "Our efforts are aligned to support the Internal Services Productivity initiative. Everything we do is intended to create a more effective operation."

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Across the pond

Who's working for Boeing Defence UK? Here are a couple of the many teammates.

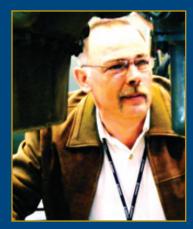




What I do: Currently, I'm looking at Interfacing Programs and Systems (IP&S) for FRES. FRES is a System of Systems program, and as such we are trying to achieve effective integration across multiple dimensions. Just part of this is achieved by looking at IP&S.

What I hope will come of the creation of BDUK: I hope it will become a stepping-stone for Boeing to grow as a business in Europe. We have the potential to become a several hundred- or thousand-person organization of UK personnel, able to operate independently and to reach back into the rest of Boeing for assistance when needed.

What I like about working for Boeing in the UK: It's an exciting place to work and we have a strong feeling of camaraderie. Having the chance to shape something new is a great opportunity and outweighs any initial "growing pains." Having support from Boeing in the United States also provides us with opportunities to develop our careers.



Stu Duncan Site manager, UK Chinook Through Life Customer Support program, Perth, Scotland

What I do: I'm responsible for oversight and provision of Boeing Technical Services and Support to facilitate the overhaul and repair of the Royal Air Force CH-47 Chinook helicopter's major and flight-critical components. We have an extremely close relationship with our RAF customer.

What I hope will come of the creation of BDUK: For the first time, we are recognized as "one Boeing" rather than a series of satellite program offices. Our ability to capitalize on lessons learned and move forward together will lay solid foundations on which we can build even stronger bonds with our customer base.

What I like about working for Boeing in the UK: It's great to be part of an organization that values its people and continually pushes the boundaries of the possible. We're able to draw on the expertise of the entire Boeing community in the development of agile, proactive support solutions.

Industrial Participation: Why it matters

Industrial Participation (IP) is an essential element of many of Boeing's proposals for contracts outside the United States, whether it's contractually required or-as in the case of the United Kingdom-strongly encouraged by the customer country. Boeing's IP agreements include placement of direct work, orders for supplies, opportunities to bid on supply contracts, transfer of technology, or other forms of assistance to the customer country. In some cases, commitments are satisfied with help from Boeing's current vendors. Since Boeing does not formally commit to IP agreements unless a contract for sale of its products or services is signed, offering a substantive IP proposal increases Boeing's chances of winning international competitions. To be considered as a beneficiary, the potential supplier must have sufficient capability and capacity and be competitive in cost, quality and schedule.

Some of Boeing's U.S. employees are concerned about the company's placement of work outside the United States. Integrated Defense Systems President and CEO Jim Albaugh said that while he understands their

concerns, "many countries require [IP]. It's a fact of life. ... I think another way to look at it is, if we didn't satisfy those requirements it would generate no additional work in the United States. Winning programs that have offset requirements creates jobs not only in the customer country but also for the rest of Boeing and our suppliers.'

Brian Moran, IDS lead for UK Industrial Participation, said IP increases Boeing's access to goods, services and intellectual property while strengthening alliances with key stakeholders-all of which positions the company for growth. "The UK government via its Defence Industrial Strategy acts in support of onshore technology creation and aerospace employment, and IP is one of the ways in which Boeing demonstrates strong awareness of and compliance with this policy," said Moran. "The advocacy we receive from our UK customers, the world-class supply of UK products and services, and the country's high level of technical innovation make our products more capable, desirable and competitive worldwide."