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Lisa Wells, procurement agent for the Small Diameter Bomb program for Integrated Defense Systems in St. Charles, Mo., pictured with SDB carriage containers that she procured for the program from a supplier. “If you work with suppliers more as teammates, they feel more comfortable coming to you with problems early on – before those problems can become issues for the program,” she says.
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Going Shopping

BOEING S T Y L E !

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The increasingly competitive aerospace environment is changing the way procurement professionals are supporting their programs and leveraging Boeing buying power.
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By BILL SEIL

Shopping isn't as easy as it used to be. Wise consumers do a lot of research before traveling to an electronics store to buy a home computer system or digital media equipment. They may read reviews, compare products or consult with friends who have made similar purchases. They give thought to how they'll be using the equipment – now and in the future.

Corporations face similar challenges as products and the marketplace become increasingly complex.

Supplier management professionals supporting Boeing programs have changed with the times, getting involved in new projects early and contributing ideas for leveraging the company's purchasing power.

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Bruce Lind, a procurement agent in Boeing Commercial Airplanes' Global Partners, is currently supporting the 787 program working on common core systems. His focus is the integrated modular avionics computing system and network, which he describes as the "brain and spinal cord" of the airplane. Over the years, moving from project to project, his job has become increasingly challenging.

"The job of procurement agent has migrated over the 29 years I've been with the company from one of a purchase order placer to that of a problem solver," Lind says.

The company is taking a more disciplined approach to leveraging the purchasing power of its combined business units, driving down costs and improving quality and response time.

In the old days, Lind would get requirements from organizations to acquire production parts or spares. His job was to process the paper. Today, working on the Dreamliner, a highly complex developmental program, he functions more as a manager working with counterparts across the organization.

The procurement requirements for the 787 are very different from those of other commercial airplanes, Lind notes. In the Dreamliner program, large sections of the airplane are being built by business partners around the world, who are subcontracting for smaller parts. This new approach to working with suppliers changes Lind's role. For example, part of his job is to make sure that all partners have common tools to operate consistently with the rest of the program.

Changes are also taking place for procurement professionals working in Commercial Airplanes' sustaining programs, though they are generally less dramatic than those involved with the 787. Tom Kornell, a procurement agent for landing gear in the 777 program, notes that Commercial Airplanes and Integrated Defense Systems have many of the same suppliers, so there is communications between business units when doing business with them. The company's growth as a global industry also affects purchasing decisions.

Technology is also providing better tools for supplier management, rapidly tracking parts as they enter and leave the system.

Many of these changes taking place in the procurement function are supporting the company's Global Sourcing initiative, which is one of four initiatives designed to accelerate long-term growth and productivity across the enterprise. The company is taking a more disciplined approach to leveraging the purchasing power of its combined business units, driving down costs and improving quality and response time.

Keith Scott, an IDS employee based in Huntington Beach, Calif., is part of a new SM&P organization called Combat Systems' Supplier Strategy (CS3). It is revising supplier management practices to strengthen SM&P's role in supporting new business opportunities. By becoming more strategic and getting involved in programs early on, it is finding new ways to add value.



Bruce Lind, procurement agent for the 787 program in Everett, Wash.

"The job of procurement agent has migrated over the 29 years I've been with the company from one of a purchase order placer to that of a problem solver."

– Bruce Lind

Scott says this value generally comes in two forms – alignment and leveraging. It begins by aligning purchasing strategies across different programs and even between business units. They identify common suppliers and common types of products and services that are being acquired.

"When we think in those terms, there are obvious benefits," Scott notes. "Some of the primary advantages are reduced duplication of effort and piggybacking purchases to leverage our buying power."

Leveraging means getting better deals for individual programs by negotiating with suppliers as a single enterprise. Suppliers may be willing to reduce costs if they see an opportunity for a greater volume of business, or long-range business opportunities. Leveraging also means looking at the lifecycle of Boeing products and working with suppliers to find the most cost-effective long-term solutions. This creates a winning situation for Boeing, the supplier and, ultimately, the customer buying the product.

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Strengthening the chain: Supplier management – an enterprise effort.



Steve Schaffer says, “We can no longer think of ourselves as individual business silos.”

Supply chain management is not just about business unit performance anymore. It’s a critical one-company effort that will have a profound effect on Boeing’s determination to improve long-term growth and productivity.

As Vice president and General Manager of Boeing Commercial Airplanes Global Partners Steve Schaffer is used to looking out for BCA. But as Engineering, Operations & Technology’s enterprise functional leader for supplier management, he and John Van Gels, deputy leader for the enterprise Supplier Management function as well as being the E&O&T leader of the enterprise Operations function, are now concerned with companywide issues.

“We can no longer think of ourselves as individual business silos,” says Schaffer. “While we’ve made some progress working across business units toward common processes and systems, there is even greater opportunity to be achieved by combining our efforts to have one Boeing face with our shared suppliers. It is about all the business units working in unison to create an enterprise supplier management strategy that improves the way we do business and ensures that all cost, schedule and quality goals are met.”

Business unit supplier management leaders have been working together with initiative and E&O&T leaders, to develop a functional framework for Supplier Management focusing on:

- Common supplier management processes and systems for the enterprise
- A standard set of enterprise supplier management metrics
- A common approach to deploying Lean initiatives into the supplier base

Schaffer, Van Gels and the enterprise Supplier Management team colleagues Dan Korte of Integrated Defense Systems, Jim Wigfall of Shared Services Group and Paul Pasquier of Phantom Works, are helping to bring a common approach to supply chain operations, contract management, shaping the supply base and leadership development.

Among the special-attention focus areas for 2007, for example, is a joint effort by BCA and IDS teams to establish common guidelines with the company’s top four suppliers. The team is defining steps for a common contracting tool set, leveraging non-production procurement spending throughout the enterprise, and creating a raw material forecast and modeling tool.

And it doesn’t end there. Schaffer and his team work closely with the Global Sourcing and other Boeing initiative teams to ensure that supplier management best practices and innovations are spread across the extended enterprise.

An important part of this strategic sourcing effort is having more direct contact with suppliers. Schaffer says the supplier management function has transitioned from arms-length contract management to relationship building. By engaging the company’s supply base – scheduling face-to-face time – they have the potential to influence the company’s primary



Ron Shelley says the company is working to create a competitive advantage for the business units by focusing on superior supply chain performance.

suppliers and the various businesses that support them. Another part is establishing greater collaboration between the business units and placing more emphasis on leadership skills and roles of supplier management agents (see Going Shopping – Boeing Style! on Page 46)

Supplier management people must go broader than their own business units, he said. They must not only thoroughly understand the programs they are supporting, including the products themselves and the production systems that are used to create them, but also the efficiencies and cost-savings that Boeing is trying to achieve at the enterprise level. The goal is to build a value stream that extends from the factory floors and

development centers across the company in the United States and overseas to deep within the supplier network.

Ron Shelley, leader of the Boeing Global Sourcing Initiative, says the company is working to create a competitive advantage for the business units by focusing on superior supply chain performance. In part, this can be done by leveraging the company’s great size and buying power to create win-win situations with individual suppliers.

Boeing has a growing need for supplier management experts who have outstanding networks both within the enterprise and the company’s supply base. Shelley says, “They are people who can quickly identify and solve problems that crop up within programs on a day-to-day basis.”

The company has made great progress in establishing strong electronic connections with its many suppliers and partners around the world, according to Shelley. This frees up the time of procurement agents, and creates opportunities for new approaches to supplier management. At the same time, the company is working with suppliers to become leaner and adopt practices that have been successful within Boeing.

“E-enabling allows us to streamline our processes, streamline our procedures and streamline our systems,” Shelly says.

While these changes are creating a strong infrastructure for improved performance, it takes an engaged work force to make things happen.

Through efforts such as the Global Sourcing and Lean+ initiatives, innovative changes developed by individual business units can be shared with other areas of the enterprise.

Ultimately, success will come from combining knowledge and learning to work with suppliers as one enterprise.



Keith Scott, part of a new SM&P organization in Huntington Beach, Calif.

“Some of the primary advantages are reduced duplication of effort and piggybacking purchases to leverage our buying power.”

– Keith Scott

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This strategic role is helping to transform supplier management, says Scott.

“Ten years ago, we were getting requisitions to buy things,” he says. “Now we’re managing our approach to the products and services we buy through an overall life-cycle focus and by broadening our relationships with suppliers for the benefit of all parties.”

IDS is also using technology to reduce transaction costs, introducing e-commerce where appropriate. IDS procurement personnel also borrow ideas from their Commercial Airplanes counterparts to find private sector solutions for government cus-

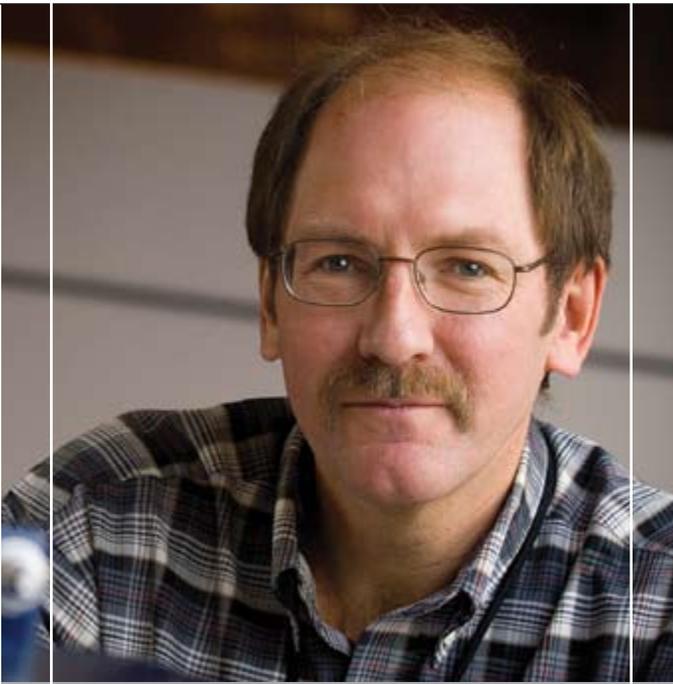
tomers. This could include industrial investment in military projects, whereby the company assumes some of the risk, to produce greater profits down the road.

Scott notes that the range of IDS projects is changing the supplier management business model. Network-centric technology and large-scale systems integration are playing an increasingly important role in meeting the needs of military customers.

“This is a very different situation for Supplier Management,” Scott notes. “It has major ramifications for the services we provide, as well as the skill sets our people will need in the future. But by constantly looking for ways to add value, we’re finding solutions that didn’t exist before.”

IDS is also benefiting from SM&P’s development of common systems and tools to use in its work. Following the mergers of the late 1990s, Boeing inherited multiple systems and processes for acquiring supplies. Each location tended to have its own way of doing things. That’s gradually changing.

Paul Nesbitt, senior manager, Systems Solutions, SM&P, is based in St. Louis. His job is to identify tools and best practices that can be used by all IDS SM&P employees.



David Bedner, procurement agent for the 787 program in Everett, Wash.

“The rate of change is accelerating. Things used to change really slowly, now they change so fast it makes your head spin.”

– David Bedner

“We’ve made a significant amount of progress over the last couple of years reducing the number of procedures, reducing the number of independent systems and reducing the number of tools that are used by each of the sites.”

Today, IDS has six sites on a single procurement system, with plans to have the rest of IDS transformed by the end of 2008. They’ve gone from more than 1,000 site procedures and processes down to a common set of just over 200.

It has been estimated that reducing supplier management tools within IDS could save as much as \$100 million over the next 10 years.

Nesbitt and his colleagues are also talking with their counterparts in Commercial Airplanes to develop common processes and tools between the business units. One challenge is regulatory differences between government and commercial programs. But this is diminishing somewhat as the military becomes more open to private-sector solutions.

Nesbitt notes that military and commercial programs have

overlaps in their supplier base and use many of the same materials. There is also a Boeing Enterprise Supplier Tool (BEST) that captures supplier management information for the entire enterprise.

“It’s partly a matter of changing mindsets, looking for common denominators and developing systems that meet everyone’s needs,” Nesbitt says.

The company’s needs are becoming far more diverse as the company explores new horizons. This requires purchasing equipment that is outside normal aerospace inventory. For example, Advanced Systems’ SBInet program is acquiring pedestrian vehicle barriers (large metal fence posts) to erect in the desert as part of the United States’ Secure Border Initiative.

Cindy Womack is a procurement agent in the SBInet program, working out of Huntsville. During her 20 years with Boeing supplier management, she has primarily supported NASA and Department of Defense programs. Her new customer, the U.S. Department of Homeland Security, has different needs. She now finds herself involved in surveys, environmental studies and road construction.

“One major contract I coordinate is for the installation of border control barriers along the Barry M. Goldwater military range in Arizona,” she says. “Boeing takes the environment seriously. For example, we’ve built barriers with holes along the bottoms so horned lizards can get through.”

Advanced Systems works in close collaboration with Phantom Works to develop cutting-edge technologies and products before they are turned over to production units. In addition to SBInet, it is responsible for Orbital Express, ScanEagle, the A160 Hummingbird and other advanced programs.

Janell Bursac, director of SM&P for Advanced Systems, says her team of approximately 100 professionals works with high-performing suppliers to meet the needs of these programs, whatever they may be. Understanding these needs involves staying engaged with the company’s business development and engineering personnel.

Supplier management used to be a more tactical profession – passing paperwork from person to person, according to Bursac. Today it involves getting out of individual silos and working across the supply chain.

“Everything we do in Advanced Systems is typically new and developmental; we’re doing things that haven’t been done before,” Bursac said. “We’re challenged to get things to market quickly. It’s really a rapid environment that requires each of us to be adaptable, agile and creative in our approach to doing business.”

Fortunately, Boeing is the kind of company where it’s always possible to find people with the right kind of expertise. Bursac’s team works with contacts across the enterprise to find needed advice. They look for strategies using enterprise resources that address the needs of Boeing customers and give the company an edge in the marketplace.

“Today’s SM&P professional needs a good mix of technical knowledge and experience combined with solid business acumen,” she said.

The demands on the aerospace industry for innovative new products and technology are growing at a rapid pace. Project teams will need people who have solid strategies for finding the best resources at the best price. ■

For more stories on how Boeing is working with its suppliers, please see the July issue of Boeing *Frontiers*.