

Striking the balance

In an era of escalating threats, shrinking budgets and service-life exhaustion of legacy tactical weapon systems, the F-35 Joint Strike Fighter is answering the call to serve as a multinational, multirole, fifth generation fighter.

Defense Supply Center Richmond (DSCR) in Virginia – the aviation demand and supply chain manager for the US Defense Logistics Agency (DLA) – has positioned itself to meet the support and sustainment challenges of the JSF program. DSCR's capabilities are far reaching – it supplies more than 1.3 million aviation-related repair parts and supports approximately 1,300 major weapon systems.

The US Department of Defense named Lockheed Martin as the prime contractor for JSF development in 2001, with Northrop Grumman, BAE, Pratt & Whitney and GE Rolls-Royce as principal partners. The F-35 is now in the engineering and manufacturing development phase, which involves the development, testing and manufacture of the entire aircraft system. During this phase, nine partner nations – the United States, the United Kingdom, Italy, the Netherlands, Turkey, Canada, Denmark, Norway and Australia – are entitled to bid for work on a best-value basis and participate in the aircraft's development, according to the JSF program website.

The F-35 is an extremely integrated air system comprising key parts, such as the propulsion system, weapon systems, autonomic logistics system and an avionics suite, just to name a few. The single-engine, single-seat fighter will be manufactured in three versions: a conventional take-off and landing version for the US Air Force; an aircraft carrier version for the US Navy; and a short-take-off/vertical landing version for the US Marine Corps, the UK Royal Air Force and Navy, and the Italian air force and navy.

JSF requirements are complex, yet the program must be affordable. It must reach new levels of lethality and, through the rigors of combat, remain survivable and supportable. In this era of joint warfighting, retaining effectiveness with less redundancy will require the JSF program to look to every available source for support and sustainment.

At DSCR's headquarters in Richmond, a dedicated weapon system support manager has already been assigned as the single point of contact for the supportability management and sustainment of the F-35, while a business development specialist is on task to help the DLA partner with the Joint Program Office, Lockheed Martin and other principal partners to develop the long-term DLA sustainment solution.

DSCR has the lead for capturing new strategic opportunities such as the F-35 and providing the full spectrum of support, to include partnering with industry and military services, and then leaning forward to warfighters on the front line. The 2005 Base Realignment and Closure act gave DSCR the ability to consolidate wholesale and retail inventory, leveraging defence

procurement to save cost. Along with this relatively new ability, DSCR will bring its many years of military logistics experience, talent, skills and knowledge to bear to make sure the JSF program meets its goals and objectives.

As with all new systems and cultural changes, there will be challenges. One such challenge will be ensuring the continuing exceptional support of legacy systems – A-10, F-16, AV8-B, and F/A-18, models A-D – until they are replaced by the F-35. These merging missions must be done without additional resources and at times may require a shift in policies and procedures. DSCR's customer facing teams, weapon system support managers, integrated supplier teams and supply planners are poised to meet sustainment challenges on these legacy systems. As new policy issues arise, DSCR coordinates with the appropriate DLA policy offices, the military services and the Department of Defense to resolve them.

Another challenge is making sure items on the F-35 are properly identified and catalogued. This challenge has far reaching implications not just for American forces, but also its allied partners. Having F-35 items properly identified and catalogued ensures that there is a single supply language and information is accurate, and DSCR can help identify sources of supply as well as users of the items. DLA manages a wide range of logistics information and item identification systems, which comprise the Federal Logistics Information System. The proper identification and cataloguing of items follow the life of the item – from development to disposal.

Future challenges facing DSCR in support of the F-35 will revolve around stock positioning and asset visibility. DSCR realises that warfighter support diminishes if the supply chain sub-optimises or does not perform, and is dedicated to striking the balance between effectiveness, agility, reliability, visibility, speed and cost. DLA's Enterprise Business System includes business tools, such as Demand Data Exchange, which enable DSCR to collaborate with its customers in advance of their needs, ensuring the right items are procured at the right time, sent to the right place, and put into the customer's hands when they need them. DSCR is also implementing Inventory Management and Stock Positioning (IMSP) to support retail integration, which will consolidate wholesale and retail inventory and make DSCR more agile in responding to local and emergency purchases and in giving it the ability to set stock levels.

"The aviation demand and supply chain has a solid history of outstanding performance and support to our nation's military," said Navy Rear Admiral Vincent Griffith, DSCR Commander. "As we move forward, we will encounter challenges, and when we do, our response must always be to do what is right for the armed forces and the Department of Defense."