F/A-18 Foreign Military Sales In-Service Support: 
Supporting FMS Aviation Systems Through Partnerships

By

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The U.S. Navy is committed to providing full life cycle logistics and engineering support to all weapon systems procured through foreign military sales (FMS). To ensure that post-production logistics and engineering support will be available for out-of-production F/A-18 FMS customers, the F/A-18 in-service support (ISS) program was established. The ISS program was activated in 1991 to provide out-of-production F/A-18 FMS customers access to U.S. Navy and commercial resources. Initially designed to provide a means for obtaining commercial support, the ISS program has become an efficient forum that enables FMS customers to address their problems with the U.S. Navy and the prime contractor, The Boeing Company, on a day-to-day basis. The ISS program currently provides post-production support to all F/A-18 A/B/C/D model aircraft. The ISS team is made up of participants from the U.S. Navy, the Canadian Forces, the Royal Australian Air Force, the Spanish Air Force, the Kuwait Air Force, the Swiss Air Force, the Royal Malaysian Air Force, and the Finnish Air Force.

Over the past nine years, the F/A-18 ISS program has evolved into much more than a contract vehicle for FMS customers to obtain information from the prime contractor. As a result of a developing partnership between all F/A-18 users, the ISS program has emerged into a highly productive, cost effective avenue for FMS customers to open dialogue and solve technical problems; to air and resolve grievances involving the FMS system; and to contribute individual expertise in support of the F/A-18 aircraft. The F/A-18 ISS program is organized and chartered under the authority of the Naval Air Systems Command (NAVAIR), under the management and administration of the AIR-3.0 competency. The ISS program was created to operate in cooperation with the U.S. Navy, and works hand-in-hand with the integrated product teams (IPTs) of the Program Executive Office, Tactical Aircraft Programs (PMA265).

Acquisition

In the initial acquisition phase of an FMS program, the U.S. Navy logistics community concentrates on provisioning and laying-in a baseline of integrated logistics support (ILS) to support the flying hour program and maintenance philosophy outlined in the Letter of Offer and Acceptance (LOA). Generally, the FMS customer is offered the capability and technical documentation to fully operate and maintain the F/A-18 at the organizational, intermediate, and selected depot levels of maintenance. A country specific ILS package is prepared for each aircraft acquisition program. The tailoring of an FMS country’s ILS package is an integral part of the initial production contract. As the production of the first aircraft is completed and delivered, the FMS aircraft program begins to enter the in-service support phase of its life cycle.

In Service Support

During the in-service support phase, the focus of aircraft support generally converts to more routine ILS issues. Since the U.S. Navy is committed to keeping all FMS aircraft supportable throughout their projected life cycle, the F/A-18 community established additional means to keep the fleet modern and operationally viable, while continuing to develop ways to reduce maintenance costs and overcome the normal obsolescence of components and subsystems. That effort is known as the F/A-18 sustaining logistics and engineering (SL/E) program. The F/A-18
ISS program has become the method which enables the F/A-18 FMS communities to share in and obtain SL/E, and to provide FMS customers with access to the U.S. Navy and the prime contractor for long term support to the F/A-18 weapon system.

The purpose of aircraft ISS programs is to improve or enhance an aircraft weapon system through the betterment of aircraft maintainability, reliability, and serviceability. In addition, aircraft program managers must continuously provide solutions to a variety of aircraft technical issues caused by routine operations and maturing aircraft. ISS activity often culminates in the development of an engineering change proposal (ECP). The integration of ECPs ensures that the aircraft custodian remains up-to-date throughout its operational life cycle. The ISS activities that provide for the continuing development of engineering and logistics solutions throughout the aircraft life cycle are essential to the operational viability the overall F/A-18 fleet.

Improving aircraft supportability and resolving component issues are prime products of the F/A-18 ISS program. Routine ISS activity is intended to make the aircraft less complicated to maintain, more reliable, and in general, easier to service and support. The F/A-18 ISS program also provides a method to develop solutions to problems which occur during the normal life cycle of any highly technical system. Thus, the ISS program provides enhancements to the supportability of the F/A-18 through the development of components created through improved technology, or as solutions to component/parts breakage or obsolescence.

The F/A-18 ISS program brings together a variety of post-production support activities pertaining to all F/A-18 users. The ISS program is fundamental to providing support to the F/A-18 aircraft and generates the majority of SL/E activity needed to support the F/A-18 fleet worldwide.

Benefits

ISS simplifies the FMS customer’s access to U.S. Navy sustaining logistics and engineering services. Without a common ISS program, it would be necessary for each FMS customer to establish individual contracts to obtain those sustaining services. Clearly, it is more economical and efficient to add all F/A-18 users to SL/E activity rather than to require each FMS customer to establish individual contracts with the prime contractor. ISS is the practical method to join the F/A-18 community into one program. The ISS charter is to aid FMS countries in the continuing operation and maintenance of their weapon systems by sharing U.S. Navy and FMS logistics and engineering data at minimum cost to all concerned.

ISS benefits the entire F/A-18 community by sharing technical information and technical expertise. As the F/A-18 systems age, supplementary logistics and engineering support will be required. To assist the FMS customers in receiving common sustaining support services, the U.S. Navy intercedes on behalf of the FMS customers by using its agent status under the U.S. security assistance program. ISS provides the system to enable the FMS community to access and share technical data originally developed for the U.S. Navy program. The U.S. Navy compiles and retains large quantities of information concerning the operation and maintenance of the aircraft resident on databases at the prime contractor and the Naval aviation depots (NADEPS). Those databases are utilized by the F/A-18 community to resolve support problems and initiate corrective actions. Maintenance and operational data are collected on an international basis. ISS is empowered to obtain aircraft deficiency data, technical information, and the results of continuing SL/E investigations from the prime contractor/NADEPs and provides a forum to exchange the data among F/A-18 users.

ISS provides a versatile cadre of organic and commercial F/A-18 logistics and engineering specialists dedicated to maintaining the aircraft in a high state of operational readiness. The
logistics and engineering support concept enables a view of the performance of the F/A-18 inventory in a worldwide operational scenario using both U.S. Navy and FMS support data and experience.

Scheduled ISS team meetings, as well as off-cycle meetings permit the direct exchange of information within the F/A-18 community. Leadership meetings are necessary for FMS customers to provide input to the ISS leadership. Meeting dialogue is recorded and becomes the official record of events and actions taken to alleviate specific problems affecting the worldwide F/A-18 fleet. Other initiatives being pursued include FMS third party transfer and exchange of F/A-18 A/B/C/D common and approved non-significant military equipment, the conversion of the technical requirements identification matrix (TRIM) to system and logistics integration capability, and the identification of a non-Halon fire extinguishing system.

**F/A-18 ISS Implementation**

The F/A-18 ISS program is a comprehensive logistics and engineering effort supporting the U.S., Canada, Australia, Spain, Kuwait, Switzerland, Malaysia, and Finland. It contains both common requirements, those which are applicable to one or more FMS customer and the U.S. Navy, and country unique requirements, those which specifically apply to one or more FMS customer and not the U.S. Navy.

The ISS country unique effort is an integral component of the whole F/A-18 ISS program. This unique effort is a relatively simple method for obtaining sustaining logistics and engineering assistance from the prime contractor concerning country specific initiatives. Each FMS customer has a predetermined number of country unique labor hours negotiated at the beginning of the annual ISS contract. Those hours are used at the discretion of the FMS customer. Tasks are accomplished in coordination with Boeing in which the technical feasibility is determined, the number of labor hours required are set, and target dates for completion are identified. Once the requirement is defined and approved by the FMS customer, the IPT forwards the requirement by memo to the contractor authorizing the “turn-on” to perform that effort in accordance with the statement of work. The ISS country unique program hours can be modified during the fiscal year to provide additional capability as required.

The F/A-18 A/B/C/D will continue to be in service through 2020 with approximately 800 aircraft in the U.S. Navy service and approximately another 400 aircraft in-service among the seven FMS customers. The ISS program provides the method and procedures to join all F/A-18 users into a single cohesive team. It was established to provide technical support services to FMS customers who operate the F/A-18 aircraft. The ISS program provides the means for the FMS customers to access the U.S. Navy information and experience. In addition, it has become a forum for the exchange of unclassified technical information on common F/A-18 issues and has developed into the official instrument to manage U.S. Navy actions in support of F/A-18 FMS users.

**About the Author**

Patricia J. Chamberlain graduated from the University of Calgary, Alberta, Canada with a B.A. degree in English. As a DoD contractor, she supported the Royal Australian Air Force F/A-18 program for nine years. In 1996, Ms. Chamberlain joined the U.S. government as a Deputy Assistant Program Manager for Logistics (DAPML). Currently, Patricia Chamberlain oversees the logistic activities of seven FMS countries while serving as the F/A-18 FMS Product Support Team Leader (PSTL) at the Naval Air Systems Command.