



## Rules Needed for Buying Pre-Owned Equipment

*Tyler Turpin*

**T**he Federal Acquisition Regulations (FAR) and the Defense Federal Acquisition Regulations Supplement (DFARS) have no policies specific to purchases of pre-owned equipment. Some state governments do have policies in their equivalents of the FAR. Because the aircraft were in different configurations, there were production delays in two programs purchasing multiple pre-owned aircraft and converting them to Intelligence, Surveillance and Reconnaissance (ISR) uses.

The purchase of used equipment that has no or minimal condition issues and is suitable for agency needs can reduce the budgetary impacts of purchase price and costs that would result from delay while awaiting equipment delivery. In the case of equipment converted for specific purposes, the design cost and time also would be reduced.

Portions of Part A of FAR Part 7.105 "Contents of Written Acquisition Plans" are applicable in determining whether it is a sound business decision to purchase pre-owned equipment. An extract of that section follows:

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**Turpin** began his acquisition career with positions in the Federal government. He is a certified Virginia Contracting Officer who has worked for 11 years for local and state agencies in the Commonwealth of Virginia.

(a) Acquisition background and objectives—

- (1) Statement of need. Introduce the plan by a brief statement of need. Summarize the technical and contractual history of the acquisition. Discuss feasible acquisition alternatives, the impact of prior acquisitions on those alternatives, and any related in-house effort.
- (2) Applicable conditions. State all significant conditions affecting the acquisition, such as—
  - (i) Requirements for compatibility with existing or future systems or programs and
  - (ii) Any known cost, schedule and capability or performance constraints.

Some states' procurement policy manuals set out the requirements for purchases of pre-owned equipment.

The Commonwealth of Kentucky's *Finance and Administration Cabinet Manual of Policies and Procedures* part FAP 111-53-00 allows for reconditioned, demonstrator or "factory-second" products or equipment if:

There is a sub-factor not mentioned in the policies of Virginia and Kentucky for determining if the purchases are in the best interest of the agency. If several units of equipment of the same make and model are being purchased, the purchasing agency must verify that all are the same in every aspect of configuration. If they are not in the same configuration, maintenance process and parts inventory may require specific procedures and parts for each unit. If they are to be converted for agency use and are not in the same configuration, each unit may require a specific conversion plan to obtain that status—and that requirement will create added project cost and delays. This happened to the U.S. Air Force in 2008-2009 with the MC-12 Liberty aircraft program.

The MC-12 program was initiated in spring 2008 through findings of the ISR Task Force that the Defense Secretary had directed to address the ever-increasing Combatant Commander's requirements to satisfy ISR capabilities shortfalls in ongoing Overseas Contingency Operations. The first MC-12 combat missions were flown in June 2009 and the



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- (a) The purchase is fully justified;
- (b) The products or equipment are of proven value to and meet the needs of the agency;
- (c) The products or equipment are available at fair market prices;
- (d) An independent appraisal of the products or equipment, attesting to the current market value, accompanies the request;
- (e) The purchase is in the best interest of the Commonwealth.

first what would eventually number 42 airframes were operational in March 2009. The MC-12W is the Air Force's multi-role, medium-altitude, manned aircraft system performing an ISR mission coupled with a target acquisition capability. Four-member MC-12 aircrews fly the aircraft, a modified King Air 350 commercial plane, to augment information gathered by other intelligence-collection capabilities operating in theater by providing real-time full-motion video and signals information to help military leaders make battlefield decisions.

Section 4.17 of the Commonwealth of Virginia's *Agency Procurement and Surplus Property Manual* requires the following documentation for purchases of pre-owned and/or used equipment: price is fair and reasonable, verification of the condition of the equipment, its future usefulness, and that its purchase would be in the best interest of the Commonwealth.

The MC-12 program was dubbed the Project Liberty Program as a nod to a World War II effort that quickly modified for wartime needs a commercial ship design and brought it into large-scale production to carry personnel, equipment and supplies. The Liberty Ship program moved forward in much the same way as the Air Force had fielded the MC-12.

A key aspect of this rapid process from identifying a need to operational use of a response was the selection of a commercial aircraft design already in production—the Hawker-Beechcraft King Air 350. Eight pre-owned aircraft were purchased from private sector owners to be converted at an L-3 Corporation facility from passenger to ISR use while a contract was negotiated with Hawker-Beechcraft for the manufacture and delivery of new aircraft to L-3 Corporation’s facility without passenger compartments installed. One was not converted.

Because there were differences in their configurations, each of the seven aircraft had to have a conversion plan to an ISR aircraft custom written in order to standardize and convert them all. This delayed the program. Bob Spivey (in 2009, L-3 Corporation’s vice president of special programs) said: “Each aircraft had a different story to tell. One had a special cooling system installed to transport many bottles of wine. All of that had to be ripped out and specially rewired to accommodate the sensor packages.”

Only seven of the eight aircraft were converted. Retired Air Force Lt. Gen. David A. Deptula—during the MC-12 program’s first 2 years the Air Force’s first Deputy Chief of Staff for ISR—said: “Those initial hiccups in the program were because the first seven MC-12 planes were individually converted from commercial use. Each of them was a bit different, and it wasn’t until airplanes started flowing off the Hawker Beech line that standardization could be implemented. But those difficulties were overcome quickly, and the completed aircraft were out to the field in record time.”

The MC -12 program used the Fast, Inexpensive, Simple, and Tiny (FIST) process. FIST as “a decision-making framework” aims to facilitate good decisions by guiding them toward opportunities to streamline, accelerate and simplify various program dimensions. The MC-12 program shared elements with some of the most successful Department of Defense (DoD) programs over the past decade that operated outside the traditional acquisition framework to deliver warfighter capabilities rapidly. The elements were: Urgent warfighter needs, short operational timelines, senior leadership attention, and sufficient funding. In a 2010 interview, then Lt. Gen. Tom Owen, commander of the Aeronautical Systems Center and the Air Force’s program executive officer responsible for buying and modernizing aircraft systems, said: “Despite its difficulties, when really tested, the acquisition community can perform with incredible agility. Some of our most successful programs [came about by being] challenged with doing something really quickly.” The MC-12 Liberty is a notable ASC example, with an entire squadron of ISR aircraft fielded in less than 10 months from concept to combat.

The MC-12 program was a repeat from 43 years before. In 1965, while the United States and its allies had forces deployed in the Southeast Asian wars, DoD purchased a commercial-off-the-shelf (COTS) aircraft for battlefield reconnaissance to supplement those that were designed for Armed Forces use

in the Forward Air Control role. In 1965, the Air Force did not expect to have enough OV-10s in Southeast Asia to replace the O-1 prior to 1968. It therefore chose the O-2, a Super Skymaster (Cessna Model 337 General Aviation aircraft) as a COTS interim replacement, because it was readily available and required no major modifications. Manufacturers supplied 532 O-2 aircraft to the DoD from 1967 to 1970 under an Air Force contract. DoD agencies operated some O-2 aircraft until 2010.

The first seven MC-12 are not the only pre-owned aircraft used for other than training or airlift roles currently in the DoD inventory.

E-8 Joint Surveillance Target Attack Radar System (JSTARS) aircraft were purchased in the 1990s as Boeing 707-300 series passenger and cargo aircraft that had seen 25 to 30 years of service by firms carrying passengers or cargo. The E-8C is a modified Boeing 707-300 series commercial airframe extensively remanufactured and modified with the radar, communications, operations and control subsystems required to perform its operational mission. The E-8C JSTARS, is an airborne battle management, command and control, ISR platform. Its primary mission is to provide theater ground and air commanders with ground surveillance to support attack operations and targeting that contributes to the delay, disruption and destruction of enemy forces. There were procurement cost overruns in the program partly because it required more effort and resources than expected to refurbish the 25- to 30-year-old 707 airframes.

The two non-DoD-owned U.S. Government aircraft most often seen on photo and video in the last quarter of the 20th and the early years of the 21st century were former airline aircraft used by the NASA Space Shuttle program. That program carried out many flights fully or partially dedicated to DoD. Two Shuttle Carrier Aircraft (SCAs) were used to ferry space shuttle orbiters and the nonspace-flight-capable test vehicle Enterprise from landing sites back to the launch complex at the Kennedy Space Center in Florida and to and from other locations too distant to allow delivery by ground transport. The performance of the two former airline plans was identical to that of the SCAs. Both were Boeing 747 aircraft purchased from airlines.

The policies of several states on purchases of pre-owned equipment and the lessons of the MC-12 and E-8 programs indicate that the Federal Acquisition Regulatory Council and the Defense Procurement and Acquisition Policy office should develop and implement policies on such. It should also be noted that a Department of Commerce report identified 83 nations that permit the unrestricted importation of pre-owned medical devices. Twenty-three of those nations have laws or policies that prevent or discourage government-operated health-care institutions from purchasing pre-owned equipment. 

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