SHELVING TECHNOLOGIES

Breaking the Acquisition Strategy Mold

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With Department of Defense (DoD) budget reductions and more planned for the future, more and more military items may be developed without necessarily going directly into production. This scenario occurred in one such program — the discharger, grenade, smoke, countermeasure — the M6. The M6 Discharger, pictured on the next page, is designed as the next-generation, smoke-grenade discharger for use on future vehicles. It consists of four fixed tubes for launching smoke grenades for the defensive obscuration of military vehicles. Since the development of the discharger was ahead of that of future vehicles, two options existed: (1) defer the end of the development program until a user is identified, or (2) end the development program but hold off on production until the item is needed. Option 2 was selected and truly makes the most sense, until U.S. Army regulations come into play.

At what point is a development program considered complete? Usually this is at Milestone III - "Type Classification." Type classification (TC), according to Army Regulation (AR) 70-1, "Army Acquisition Policy,"[1] is the process identifying the degree of acceptability of a materiel item for Army use and provides a guide to authorization, procurement, logistical support, and asset and readiness reporting. It is an integral part of the Milestone III production approval process. The TC is the Army's implementation of the DoD requirement that an item is "approved for Service use" before expending procurement funds (DoD Instruction 5000.2, Part 3.g).[2] Again, it might be appropriate to complete the development effort by conducting a Milestone III In-Process Review (IPR), type classify the item, and have no immediate production plans in place. However, AR 70-1. Para 3-2.c(2) of AR 70-1, which does not allow this, specifically states "Items will only be type classified for introduction into the force if procurement is planned within the current Program Objective Memorandum (POM) period."

A.

B.

Exploring Alternatives

The previous excerpt does not appear to be vague or subject to interpretation. It is straightforward; no production dollars equals no TC. How would you, then, come to an orderly conclusion of the development effort? A commitment to procure was not sought, only a recognized completion point — a specific point in the life cycle that is identified with the completion of the development effort. Two alternatives were explored. First, use some other predetermined milestone which would signify the completion of development without TC, or type classify the item (either by pursuing a waiver or being in conflict with the AR).

This first option, interpreted as completing the development of the item just short of type classification, appeared to be viable. This way, AR 70-1 would not be violated. However, not holding the Milestone III IPR would require that one be held

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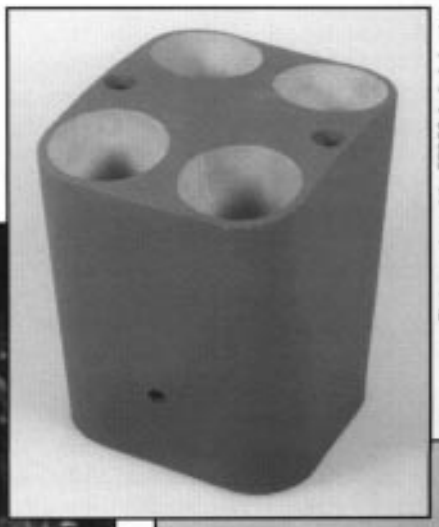
later — probably right before production. If this IPR took place years after the development effort, names and faces of IPR members would have changed as well as, quite possibly, the regulations governing the process. Issues that likely come up during an IPR, a testing concern for example, would probably be easier to resolve if the testing was completed recently and if the same personnel were still involved in the program. A timely wrap-up of all loose ends made more sense, that is, really complete the development effort by convening an IPR as soon as possible. So, the first option was not pursued.

The second option was chosen. Using the premises that "regulations are just guides" and a mindset to "break the mold," a Milestone III IPR was scheduled. Following this strategy, the plan was to TC the item and shelve the Technical Data Package (TDP). This brought up another concern - how do you shelve a TDP? What does this mean? Like anything else in the development cycle, regulations must exist that govern the shelving process. Little guidance was found on shelving procedures, since this was in conflict with the regulation. So, as a minimum, a shelving plan was formulated. The purpose of this plan was to ensure an orderly transition of information and concerns from the development effort to the production effort. The Shelving Plan for the M6 Discharger was separated into three sections: (1) TDP, (2) Logistics Support Analysis, and (3) Interface for the Vehicle.



Photos courtesy of the ERDEC Audio Laboratory

C.
D.

A. The M2 Bradley tests smoke grenades launched from the M6 Discharger.
B. The M6 Discharger mounted on an experimental vehicle.
C. The M6 Discharger.
D. The M6 Discharger mounted on the M2 Bradley.

The TDP Shelving Plan

The TDP Shelving Plan includes recommendations for alternate sources and methods of manufacture and inspection not verified in development and, thus, not formally part of the TDP. This information is available and should be made part of the permanent record for future use — as for a preproduction evaluation (PPE) effort.

The M6 Discharger, as with all smoke grenade launchers, does not have a separate technical manual. Information on the operation and maintenance of the discharger is provided in the associated technical manuals for the host vehicles. Since host vehicles have yet to be identified, these manuals have not been generated. Therefore, a portion of the Shelving Plan was developed to document the results of the logistics support analysis conducted by the M6 development team. This information will assist host vehicle developers in creating technical documentation associated with operating and maintaining the M6 Discharger.

Interface data also was documented in the shelving plan. Mounting hardware and cabling connecting the M6 to the host vehicle is vehicle specific and not part of the M6 Discharger TDP. For test and demonstration purposes, mounting hardware and electrical connectors were developed for two currently fielded systems. This information could assist other host vehicle developers in creating the interface for the M6 Discharger.

The aforementioned shelving information was compiled and included in the M6 TDP as an advisory note to

the top assembly drawing. As part of the TDP, it ensures the information is provided to the production team, if and when production of the item begins.

Now it appeared everything was in line to Type Classify the M6 and shelve the TDP until production is identified. Important to point out is that there were no "show stopper" issues relevant to the hardware. The M6 Discharger had met its technical and operational requirements and the prerequisites of the Milestone III decision had been fulfilled — that is, except for compliance with AR 70-1.

Several members of the IPR did not have the same interpretation of regulations being guides and breaking the mold. Two members of the IPR did not concur with the Milestone III TC action. Again, this was not due to any shortcoming of the hardware, only due to noncompliance with AR 70-1.

The Technical Director, ERDEC/ Milestone Decision Authority, decided to complete the development of the item with a "standard" type classification, not go immediately into production, and shelve the TDP. This breaks the mold of traditional acquisition strategies, as it does not comply with regulations built around the old way of doing business. The DoD budget restraints dictated the most economical, yet technically acceptable, option. This appeared to fit into the new DoD acquisition approach of developing and shelving new technologies. When the M6 Discharger is needed, the production team will be busy but well-prepared.

Endnotes

1. Department of the Army. Army Regulation 70-1, "Army Acquisition Policy," 30 April 1993.
2. Department of Defense. Department of Defense Instruction 5000.2, "Defense Acquisition Management Policies and Procedures," February 1991.

NOW AVAILABLE

AIR FORCE ACQUISITION MODEL VERSION 2.0

The Air Force Acquisition Model (AFAM) Program Office has released AFAM Version 2.0. The AFAM is a computer-based reference tool designed to capture and provide essential information on AFMC processes. The AFAM targets inexperienced personnel by describing what is required to accomplish basic tasks and provides needed reference documentation such as policy, regulations and directives. The model also provides "how" others have accomplished these tasks by capturing the Best Practices, Lessons Learned, and experience/wisdom of personnel who have been in similar situations. The AFAM uses current technology to provide an automated tool that provides acquisition and support knowledge to the workforce with a few clicks of the mouse on their desktop computers.

The AFAM application provides information to assist in the completion of acquisition and support tasks across all functional disciplines. It is designed to assist personnel in performing tasks from preconcept exploration through disposal for weapon system acquisition, modification, and support programs. Task descriptions, references, lessons learned, templates, samples, documents, applicable software tools, and nominal timelines are provided in an easy to use Windows-based environment. Updated semiannually, AFAM provides current and accurate information on acquisition and support processes. Packaged with AFAM is AFAMSUP, a fast text search/retrieval tool, with key documents such as DoD directives, Air Staff or MAJCOM policy letters, regulations, military standards, pamphlets, guides and handbooks. For this release, AFAMSUP has been converted to a Windows environment, giving the user more capabilities for searching through all the reference material.

Version 2.0 of AFAM includes nearly 40MB of information on more than 4,000 tasks, and on-line access to 113 reference documents. A graphical display feature that allows the user to see how each task fits into the AFMC core processes also is included. Another powerful enhancement provides a direct link between the AFAM tasks and the associated reference documents in the AFAMSUP. This allows the user to instantly access direct information applicable to each task.

Colonel Mike Ferrell, AFAM program director stated, "A tremendous amount of effort has been put into this release in response to our customers' requirements. I think our customers are going to be delighted with this product because it offers them more flexibility and a wider range of information. Take a look at AFAM 2.0 for yourself and let us know what you think."

For information on how to obtain a copy of the system, telephone the AFAM Program Office at DSN 785-0416 or (513) 255-0416.