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UNITED STATES NAVY  
FMS AMMUNITION IMPROVEMENT PROGRAM

By

MICHAEL L. BARTLETT

BACKGROUND. On 25 January 1982, after a series of planning meetings with cognizant Navy activities, Commander, Naval Supply Systems Command (NAVSUP), acting as lead system command for security assistance, established a Naval Material Command-wide Ammunition Improvement Program with two goals:

- Reduce unplanned drawdowns on USN inventory to satisfy Foreign Military Sales (FMS) requirements.
- Improve the service to foreign customers by delivering ammunition items on time and within original case values.

Over the next 18 months program goals were achieved while dramatically reducing delinquent FMS ammunition requisitions (see Chart 1). The Ammunition Improvement Program owes its birth to an October 1981 analysis of Navy performance in achieving on time delivery within original case value for ammunition cases. This analysis yielded the startling statistic that 50% of all open Navy ammunition requisitions would not be delivered on time and had experienced consequent cost growths often exceeding 100%. Delinquencies were affecting 40 country programs involving approximately 225 FMS cases and hundreds of requisitions.

GOALS. It was agreed early on that program goals must be unambiguous and measurable. The first goal,

- Reduce unplanned drawdowns on USN inventory to satisfy Foreign Military Sales (FMS) requirements,

resulted from another October 1981 finding that the Navy was using uncontrolled issues from stock to satisfy many delinquent FMS requisitions. These unplanned drawdowns could harm the USN if not brought under control. Achievement of this goal would be measured by tracking the number of impact statements issued monthly by The Navy Ammunition Inventory Control Point (ICP), Ships Parts Control Center (SPCC), Mechanicsburg, PA. Impact statements were being issued at an average of 20 per month in late 1981. A reduction in the average number per month would signal progress in accomplishing the first goal. The second goal,

- Improve the service to foreign customers by delivering ammunition items on time and within original case values,

focused on the basic agreement made on the DD Form 1513 Offer and Acceptance -- an item delivered at an agreed upon time, at an agreed upon price. This goal would be measured by tracking the percentage of delinquent requisitions. A delinquent requisitions is defined as follows:

- The item is not on contract and the delivery date will slip in excess of 90 days.

LIFE CYCLE ANALYSIS. The approach taken in developing Ammunition Improvement Program objectives is summarized as follows:

- Analyze the life cycle of ammunition cases -- from original country request through ultimate case closure.
- Identify crucial events in the life cycle.
- Match problems being experienced to these crucial events.
- Identify what's broken.
- Fix it.

The clear signal from NAVSUP to the Improvement Program team was to solve problems, not point fingers.

The team was drawn from all activities both within and outside the Navy, involved in providing ammunition to our FMS customers and others who could assist us to solve problems (see Chart 2). Chart 2 is provided only to indicate the range of activities participating as team members not their role or responsibility.

POLICY/OBJECTIVES. NAVSUP appointed an Ammunition Improvement Manager with overall responsibility for achieving program goals within 18 months. Progress would be reviewed semi-annually with the first review scheduled for May 1982. The Manager's first task was to develop a program policy and a suite of initial program objectives. The decision was made to concentrate on new FMS ammunition cases early in their life cycle. Management emphasis would be on "prevention" not "cure." Older cases late in their life cycle would not, however, be abandoned. "Damage control" techniques would be employed to improve older case status; among these are:

- Stock issue.
- "Buy within available funding."
- Substitution of items.
- Contract modification to include delinquent items.
- Aggregation of requirements.
- Case item cancellation.

The primary management emphasis, to repeat, would be on new cases -- those implemented after 1 January 1982 and new Price and Availability requests received after that date.

Based on this basic policy, four initial Ammunition Improvement Program objectives were developed by the team:

- Reduce price and availability (P&A) data response time to 45 days and improve P&A quality.
- Develop a single summary level data base for use in determining status of all country ammunition programs.
- Improve technical support to the Navy Ships Parts Control Center (SPCC) Mechanicsburg, PA.
- Improve US Army Armament Munitions and Chemical Command (AMCCOM) support to the USN.

These objectives are clearly associated with "up stream" phases of the case life cycle (i.e., pre-case planning, P&A development, management tools development, procurement document preparation, etc.). The four initial objectives serve a complex set of needs. Achievement of objective number one, "reduce price and availability (P&A) response time to 45 days," involved much more than simply speeding up the process (though improved turn-around-time was a major concern). Equally important were quality improvements, especially those associated with pricing, calculating realistic procurement and administration lead times, and assuring accurate technical item identification. Achievement of objective number two would provide, for the first time, a common, easily understood management tool to assist the Navy team in determining the status of any individual ammunition requisition, the status of an FMS case or an entire country program, or the status of the entire USN ammunition program. Objective number three involved re-establishing lines of communication between the ammunition technical community and SPCC, and outlining specific responsibilities for each activity in support of SPCC. Objective number four focused on establishing effective communication with the DoD Single Manager for Conventional Ammunition -- AMCCOM, Rock Island, IL, and obtaining satisfactory service on FMS-related Military Interdepartmental Purchase Requests (MIPR) that the Navy submits to AMCCOM for procurement action. Specifically, the Navy wanted AMCCOM to measure its performance in satisfying Navy MIPRs against a Navy "yardstick." Since AMCCOM procured by dollar volume 50% of all Navy FMS requisitions, the program could not succeed without AMCCOM's support.

PROGRAM INITIATION. NAVSUP's 25 January 1982 letter incorporated the goals, policy, and objectives outlined above. This letter also established milestones for accomplishing selected sub-goals and objectives. The Chief of Naval Operations (OP-63) endorsement of the Ammunition Improvement Program added a number of sub-goals and requested established milestones be advanced. The first of these milestones would be the initial semi-annual program review scheduled for May 1982.

The purpose of this initial review would be as follows:

- Review each customer country ammunition program.
- Determine the status of each open requisition on each case.
- Establish a baseline for subsequent reviews to measure progress.
- Highlight areas requiring immediate management attention.

If this review were to achieve its purpose, much would have to be accomplished by the team in the intervening three-plus months. It should be noted that only a few team members were involved with FMS or Ammunition full-time as a normal part of their duties. Team membership was typically an "additional" duty; this included the Program Manager.

PHASE I INITIATIVES. It is safe to say that none of the team members were, at this juncture, overly optimistic of the program's ultimate success. The first tasks accomplished, following program initiation, involved defining the specific improvements desired in ammunition case P&A data prepared and submitted by SPCC, and developing the system design and output format for the Summary Level Data Base. A substantial re-programming of resources

was required by NAVSUP to fund necessary computer programming and data loading. Broad P&A quality improvement requirements were levied on SPCC coupled with a demand to reduce average response times for P&A data to 45 days.

Another major initiative involved AMCCOM, then ARRCOM. In February 1982, Navy representatives presented ten point papers with supporting documentation outlining specific problems being experienced by the Navy which if corrected would improve support to Navy customers. AMCCOM took immediate action to solve the problems and agreed to measure their performance by a "yardstick" meaningful to the Navy. Many of the Navy complaints were recognized by AMCCOM management prior to the February 1982 meetings and corrective action was, in some cases, already underway. AMCCOM identified problems it was experiencing with the Navy and asked the Navy to take appropriate corrective action. The Navy agreed.

The following month, unrelated to the Ammunition Improvement Program, the Joint Conventional Ammunition Program (JCAP) Coordinating Group established an FMS Ad Hoc group to ". . . develop joint conventional ammunition policies and procedures on the interface and relationship between the Military Services and the SMCA [AMCCOM] as they pertain to the security assistance program."\* The Navy Ammunition Improvement Program Manager was named the chairman of this Ad Hoc group. This presented the Navy with a superb opportunity to institutionalize improved service by AMCCOM by helping draft the DoD instruction (DoD 5165.65-M, Part 18) governing AMCCOM.

To improve our technical base, technical data package reviews were undertaken at NAPEC (Naval Ammunition Production Engineering Center) in Crane, Indiana, and PMTC (Pacific Missile Test Center) at Pt. Mugu, to upgrade these packages as required to avoid procurement delays tied to out-of-date Technical Data Packages (TDPs). In addition, technical reviews of each new P&A were implemented by cognizant hardware Systems Commands (NAVAIR, NAVSEA) to: insure weapons system compatibility and proper technical item identification, forecast production problems, identify opportunities for joint procurement, and provide appropriate technical guidance to SPCC. The primary purpose of these technical reviews is to assist SPCC in recognizing and overcoming any impediment to "on time" delivery early in the life cycle of an FMS case.

FIRST SEMI-ANNUAL REVIEW -- MAY 1982. As shown on Chart 1, during the May review, the team reported an encouraging reduction from 50% to 31% in the percentage of open Navy FMS requisitions that were delinquent. These gains were achieved primarily on older cases using the "damage control" techniques described above. More important than the percentage improvement were the accomplishments of the first two objectives. SPCC was now meeting the 45 day goal and was making substantial qualitative improvements which would pay dividends when these cases were implemented. And the Summary Level Data Base was designed, programmed, developed and implemented in time to use the output (Chart 3) for this initial review. Substantial progress was also reported during the initial review toward improving AMCCOM's support to the Navy as measured by improved delivery forecasts.

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\* SMCA is an abbreviation for "single manager for conventional ammunition."

PHASE II INITIATIVES (CHART 4). The first review established a valid baseline to measure future progress. To insure progress was maintained CNO established a goal for FY 1983 to reduce by 50% delinquent FMS ammunition requisitions. To this, the team added a sub-goal to correct by case amendment or other means all areas highlighted during the first review as requiring immediate management attention. The milestone for accomplishment of these sub-goals was the next review scheduled for December 1982. The primary concentration between the May and December reviews was insuring delinquent requisitions and any requisitions from recently implemented cases were placed on contract. This effort involved a complex range of tasks involving SPCC procurement "shops" and cognizant AMCCOM directorates. Four other significant events occurred during Phase II. First, NAVSUP provided funds for "smart" word processors to speed P&A data preparation. Second, the Navy assigned an O-6 as full-time Navy Liaison at AMCCOM. Third, three additional billets were approved at SPCC dedicated to the FMS ammunition program. Fourth, the draft Part 18 of the Joint Conventional Ammunition Procedures (DoD Instruction 5160.65-M) was completed and published by the FMS Ad Hoc group.

SECOND SEMI-ANNUAL REVIEW -- DECEMBER 1982. Chart 1 illustrates the dramatic reduction in delinquent ammunition requisitions since the May review. Both Phase II sub-goals were achieved primarily through case amendments to increase case value so that sufficient funding was available to place items on contract and obtain firm delivery commitment dates.

In addition to the dramatic decrease in delinquent requisitions, which measures improved service to foreign customers, SPCC was able to show a sustained downward trend in unplanned drawdowns on USN inventory to satisfy FMS requirements. From a high of 20 per month, urgent requests for stock issue had stabilized at 5 per month by December 1982. It appeared both Improvement Program goals were being achieved more rapidly than anticipated.

PHASE III INITIATIVES. To ensure the pace of progress was maintained, a new set of objectives was identified to supplement the original four.

- Fully implement life cycle management for all cases implemented since 1 January 1982.
- Publish life cycle management desk top procedures and train all personnel.
- Following approval, implement JCAP Part 18 Navy-wide.
- Achieve electronic link-up between AMCCOM and SPCC.

The first two new objectives are mutually supporting. The Navy team wanted to ensure that uniform management practices (life cycle concepts) would be applied to ammunition cases and that individual performance would be evaluated in terms of these uniform practices.

The second two objectives are, also, mutually supporting. JCAP Part 18, when fully implemented, institutionalizes life cycle management concepts in DoD Instruction 5160.65-M. An ability to communicate requests for P&A, P&A data, MIPRs and modifications and forward inquiries and obtain status would both speed and improve communication between SPCC and AMCCOM making execution of JCAP Part 18 easier.

"Life cycle management" concepts key on the crucial events or milestones of a typical ammunition FMS case, assigns qualitative and/or quantitative standards to be met for each milestone, periodically reviews performance against these standards, promptly intervenes when a slippage or shortfall is detected, and feeds back the information to the Navy team in a uniform, easily understood media [Summary Level Data Base (SLDB)]. Chart 4 outlines sample case life cycle milestones and an assigned quantitative standard. A more complete discussion of Ammunition FMS case life cycle management is found in Part 18 JCAP DoD Instruction 5160.65-M.

THIRD SEMI-ANNUAL AMMUNITION PROGRAM REVIEW -- JUNE 1983. As Chart 1 illustrates, by the third review delinquent requisitions had dropped to less than 9% of the FMS total. During this review new cases were obviously benefitting from improvement program measures and the life cycle management concept. Only two open requisitions for cases implemented since 1 January 1982 were delinquent. Since the frequency of unplanned drawdowns had remained constant from the last review and new case status substantially projected on time delivery within original case value, the goals of the Ammunition Improvement Program were being achieved. All four of the original objectives had been achieved, and the team reported achievement of the four Phase III objectives as well. Following the third review, the Ammunition Improvement Program was evaluated a complete success.

SUMMARY. The Navy's Ammunition Improvement Program illustrates what can be accomplished with high level attention; clear, unambiguous and measurable goals; a single management tool to post status and evaluate progress; an overall management concept which recognizes all parts of the system for delivering the item to the FMS customer; the cooperation and assistance of other DoD activities; and frequent program progress reviews. It is impossible to single out one factor as the most important in this achievement, however, it is doubtful the dramatic drop in delinquent requisitions would have been possible without the cooperation and leadership displayed by AMCCOM in addressing Navy concerns.

In addition, improvements are accomplished by people, not systems. Each member of the Navy team enthusiastically embraced this program, its goals and objectives, and made it work.

CHART 1  
DELINQUENT FMS AMMUNITION REQUISITIONS

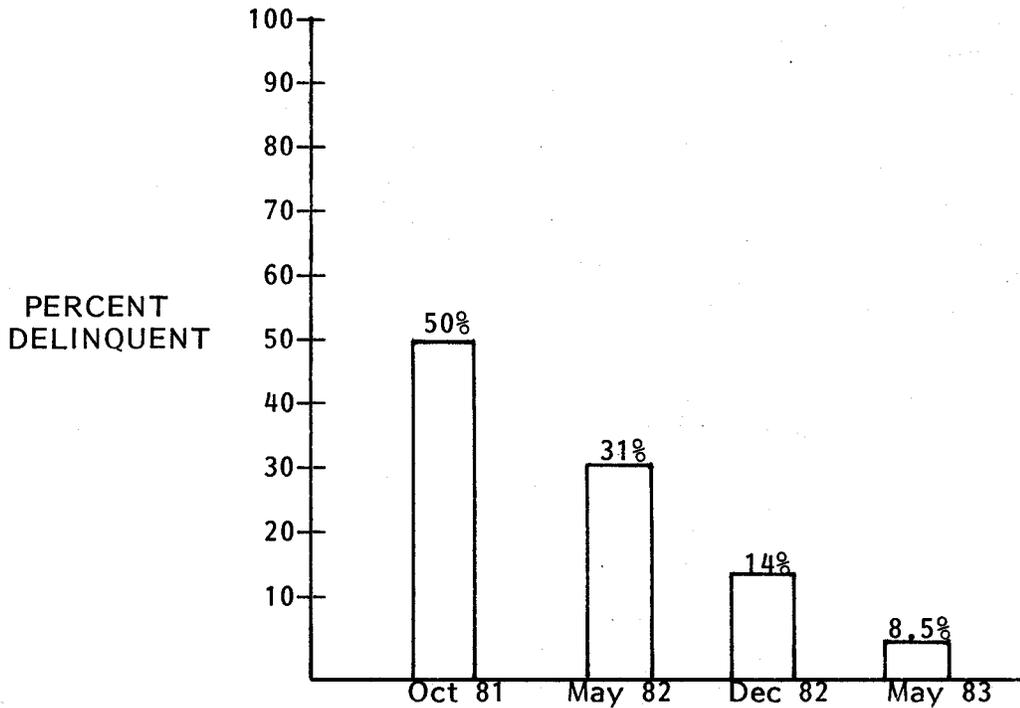


CHART 2  
AMMUNITION IMPROVEMENT PROGRAM TEAM

- CHIEF OF NAVAL OPERATIONS
  - OP-63 Security Assistance Division
  - OP-41 Material Division
- NAVAL MATERIAL COMMAND
  - NAVAL AIR SYSTEMS COMMAND
    - AIR-05
    - AIR-103
    - Naval Ordnance Station, Indian Head, MD
    - Pacific Missile Test Center, Pt. Mugu, CA
  - NAVAL SEA SYSTEMS COMMAND
    - SEA-906
    - SEA-642
    - Naval Ammunition Production Engineering Center, Crane, IN
  - NAVAL SUPPLY SYSTEMS COMMAND
    - SUP-07
    - SUP-05
    - SPCC, Mechanicsburg, PA
    - NAVILCO, Philadelphia, PA
- AMCCOM, Rock Island, IL
- USAF, International Logistics
- USA, International Logistics
- DoD

SPCC-CAIMS  
CB03JX1-CB03JAIL

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**SECURITY ASSISTANCE PROGRAM**  
**CONVENTIONAL AMMUNITION MANAGEMENT SUMMARY**  
**(SEQUENCE - COUNTRY, CASE, DOCUMENT NUMBER)**

FOR SR SAS

DOCUMENT NUMBER	CONDITION	STATUS	COG	NALC	N S N	QUANTITY	NOMENCLATURE
PSR08481075145	RED	BV	2T	A855	1305 002500200	2432	CTG, 20MM, LINKED

**IMPLEMENTATION REQUIRED      REVISED**

DATE	DEL DATE	DEL DATE	REASON FOR SLIPPAGE
	12-31-82	08-30-83	TECHNICAL DATA PACKAGE REQUIRES REVISION

**CASE**

**REVISED**

UNIT PRICE	CONTRACT	UNIT PRICE	REASON FOR INCREASE/DECREASE
4.76	N0010482MP18451		

**\*\* MANAGEMENT ACTION-**

IMP STATEMENT FWD OP411, NOT RELEASABLE FM STK. NOT ON CONTRACT. TDP OT AVAIL F/COMPONENT M210 CTG.  
SENDING MSG TO PUSH TDP. TDP REC'D AUG 82-RDD AUG 83. (82298)

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CHART 4  
SAMPLE LIFE CYCLE MILESTONES

<u>EVENT</u>	<u>MILESTONE</u>	<u>STANDARD</u>
IMPLEMENTATION	0	17 DAYS
CASE DIRECTION	1	30 DAYS
LOAD SLDB	2	5 DAYS
PR/MIPR	3	120 DAYS

CASE CLOSURE

Michael L. Bartlett is the Program Control Branch Head for the Security Assistance Division of the Naval Supply Systems Command. He received a B.A. from the University of California and an M.S. from the University of Southern California. Before coming to work for the government in 1977, he worked for Bell Helicopter International and served in the Marine Corps as a helicopter pilot.