THE MATERIAL MANAGEMENT ACCOUNTING SYSTEM (MMAS)
IS IT A PROPERTY FUNCTION OR NOT?
Dr. Douglas N. Goetz, CPPM, CF
President, GP Consultants LLC

INTRODUCTION

A certain degree of “sturm and drang” has erupted over the publication of the Department of Defense Business Systems rules. Is the Material Management Accounting System (MMAS) a Government Property area or a Financial Control area or a Production Scheduling area? Who reviews it? Who approves it? And if it is some other activity within the United States Federal Government (Really the Department of Defense) does the Government property function have any responsibilities?

With that said, let’s talk about the MMAS from a number of different perspectives:

Historical Genesis of the MMAS
System Criteria or Standards
The MMAS as a Business System Rule (BSR)
Government Property within the MMAS – the PA’s Roles?

HISTORY OF THE MMAS

A Department of Defense Application

I am going to go back in history to a regulation that was in place a long time about – close to thirty years ago. I am going to reference the Defense Acquisition Regulation (DAR) which was the name change to the Armed Services Procurement Regulation (ASPR). Under this old regulation, which a few of our NPMA members may remember, there was a requirement set forth in Appendix B which was a regulatory document entitled Government Property in the Possession of Contractors. The specific requirement – or really an allowance – was referenced at Paragraph B-303(e) and was entitled the Multicontract Cost and Material Control.

(i)Description and Scope. A multicontract cost and material control system constitutes a modification of the requirements for physical identification of Government material and substitutes therefor a system of financial accounting. The system operates as follows:

(A) The contractor may acquire, purchase, requisition, receive, store, and issue like items of material for the total requirements of all contracts involved in the system without identifying the material to each contract.

(B) The contractor may commingle, during all stages of contract performance, Government-owned and contractor-owned material and work-in-process, which was furnished, acquired, or produced for all Government contracts of any type covered by the system, without physical segregation or identification to the individual contracts.

(C) In lieu of physical segregation and identification to individual contracts, periodic calculation of requirements and distribution of costs to all
contracts permits the allocation of material costs to products delivered. This system by reflecting the materials expended to perform each contract at any stage in production, permits usage analysis to determine the reasonableness of consumption and expenditure of Government material.

(D) The system may appropriately include all Government contracts of any time which involve common repetitive operations.

(E) The system does not require commingling of all common materials of all contracts included. For example, items of Government-furnished material of high value or in short supply may be excluded from commingling and reserved for use in performance of the contract under which furnished.

(F) Notwithstanding B-502, physical inventories of material in stores included in the systems (other than work-in-process) will be taken by the contractor at least annually, price extended, and reconciled to the quantitative balance for each item, and adjustments recorded in the stock record and financial inventory control accounts. Such physical inventories and adjustments shall be reviewed by and are subject to the approval of the property administrator. An equitable distribution to cost accounts of any inventory losses will be subject to a like review and approval.

(ii) Authorization. The Administrative Contracting Officer may authorize a contractor who is performing or will perform more than one Government contract to use the multicontract cost and material control system in accordance with this paragraph. The property administrator will, for each system authorized, approve detailed operating procedures as are necessary for that particular system.

(iii) Criteria. A multicontract cost and material control system may be authorized if:

(A) the contractor demonstrates that savings or improved operations will result from adoption of the system or that it will otherwise be in the interest of the Government;

(B) the contractor's accounting system is adequate to satisfy the requirements set out in B-312; and

(C) the system is applied to existing Government contracts only and excludes materials acquired or costs incurred for non-Government work or in anticipation of future Government work.

I wanted you to read this, the Multicontract Cost and Material Control System (MCCMS), as there are a number of critical aspects, again from a historical perspective, that help us understand the formation of the current MMAS. Material Requirements Planning (MRP) systems emerged in the 1960 – and from a commercial application perspective – the MMAS emerged from the MRP system. Therefore, the Department of Defense MUST have been aware of MRP at that time or slightly later as my source document is from the ASPR dated 1 July 1976. The MCCMS applied FINANCIAL controls – embedded within a Property Management System – to manage Government property of the MATERIAL classification ACROSS contracts. Listen to the words, “…constitutes a modification of the requirements for physical identification of Government material and substitutes therefor a system of FINANCIAL ACCOUNTING (Emphasis added).”
Which is exactly what the MMAS does! Simply put, the MCCMS can be viewed as the precursor of the MMAS. And as a Property Advocate – it is AMAZING that this was in a PROPERTY REGULATION!

MRP and MRPII

In 1990 Goetz and Paciorek provided an analysis of the MMAS and its historical underpinnings in an article for this professional association (NPMA Inc.). They provided the following discussion.

Is it possible to more effectively, economically, and efficiently manage the amount of material we have on hand at any one time? The manufacturing community has long been researching and searching for alternate methods. One of those methodologies is a system of ordering, inventory control and utilization called Material Requirements Planning, more succinctly entitled "MRP."

Orlicky (1975), one of the seminal theorists in MRP, provides two definitions of an MRP system. The first states,

A material requirements planning system, narrowly defined, consists of a set of logically related procedures, decision rules, and records (alternatively, records may be viewed as inputs to the system) designed to translate a master production schedule into time phased net requirements, and the planned coverage of such requirements, for each component inventory item needed to implement this schedule. An MRP system replans net requirements and coverage as a result of changes in either the master production schedule, or inventory status, or product composition. (p. 21)

Orlicky's second definition states, “An MRP system can be thought of as a set of logically linked inventory records, coupled with a program (or programs) that maintains these records up to date. (p. 175)"

Manufacturing resource planning (MRP II) is defined as a method for the effective planning of all resources of a manufacturing company. Ideally, it addresses operational planning in units, financial planning, and has a simulation capability to answer "what-if" questions and extension of closed-loop MRP. (Wikipedia, 2013).

Oliver Wight (1982), whom many consider the father of MRPII, puts it most simply in his description of MRPII. “MRPII is a total company-wide system. It is a way to get all the people in the company working to the same game plan; to the same set of numbers. A company can now plan material, capacity, finance, marketing strategy, etc. all with the same system. In addition, all these things can be simulated to provide the management of the company with real planning capability (p. 81).”

THE MATERIAL MANAGEMENT ACCOUNTING SYSTEM (MMAS)

In the Friday, October 28th, 1988 edition of the Federal Register (Vol. 53, No. 209, DAR Case 88-311) the Government published the proposed rules for a Material
Management Accounting System. In Defense Acquisition Circular Number 88-7, dated 31 May 1989, the final rules for the MMAS were published. Over the past twenty four years there have been a few changes to the MMAS regulations – but the fundamental concepts have remained the same.

So, why the renewed concern? Because in 2012, in response to Congressional pressure, the Department of Defense created new regulations regarding what it called Business Systems. There are six business systems called out in the Department of Defense Federal Acquisition Regulation Supplement (DFARS):

Our favorite -- Government Property System
The Accounting System
The Estimating System
The Purchasing System
The Earned Value Management System (“EVMS”) and
The Material Management and Accounting System (“MMAS”).

So, in the DFARS we find the policy regarding the Business Systems Rules (BSR) at 242.70 and its related clause at 252.242-7004. We find the policy for the MMAS at 242.72 and its related clause at 252.242-7005.

So, it is wise for the Contractor Property Professional to understand the requirements and application of the MMAS within their company’s operation and for the Government Property Professional to understand their role in the Government’s review of a Contractor’s Property Management System.

Lastly in this section we need to look at the APPLICATION of the MMAS. DFARS 242.7202 Policy states:

(a) DoD policy is for its contractors to have an MMAS that conforms to the standards in paragraph (e) of the clause at 252.242-7004, Material Management and Accounting System, so that the system—
   (1) Reasonably forecasts material requirements;
   (2) Ensures the costs of purchased and fabricated material charged or allocated to a contract are based on valid time-phased requirements; and
   (3) Maintains a consistent, equitable, and unbiased logic for costing of material transactions.
(b) The cognizant contracting officer, in consultation with the auditor and functional specialist, if appropriate, shall—
   (1) Determine the acceptability of the contractor’s MMAS and approve or disapprove the system; and
   (2) Pursue correction of any deficiencies.
(c) In evaluating the acceptability of the contractor’s MMAS, the contracting officer, in consultation with the auditor and functional specialist, if appropriate, shall determine whether the contractor’s MMAS complies with the system criteria for an acceptable MMAS as prescribed in the clause at 252.242-7004, Material Management and Accounting System.
Notice that I emphasized “MATERIAL” requirements, and the issue of “purchased and fabricated material charged or allocated to a contract.” My reason for this is to clarify that this “system” applies ONLY to MATERIAL – not Special Tooling, not Special Test Equipment, not Equipment – and certainly not Real Property. Just MATERIAL!!! The second part emphasized – “CHARGED OR ALLOCATED to a contract.” This is a rather interesting statement that requires explanation. So just WHAT is included under this construct?

Question -- How about material acquired under a Cost Reimbursement type contract and charged direct to that contract?
Answer -- Yup, that stuff is Contractor Acquired Property (CAP) (FAR 52.245-1) of the material (FAR 52.245-1) classification.

Question – How about Material acquired under a Fixed Price Contract with Progress Payments – where the costs are properly allocable and chargeable to that contract?
Answer – Yup, that stuff is Progress Payments inventory (FAR 52.232-16)

So, it appears that the intent of the MMAS is to allow MATERIAL titled to the Government to be used wherever it is most urgently needed – in point of fact, that is one of the hallmarks of the MRP/MRPII systems. But, there are two twists that I would like to address.

The MMAS also requires that this system embrace CONTRACTOR OWNED MATERIAL. You will notice throughout the MMAS clause that there are allowances for commingling contractor material with Government owned material, an allowance for common inventories, loan paybacks, and a few other tidbits alluding to this allowance. So, the MMAS encompasses Contractor Owned Material, Government Property of the CAP Variety and Progress Payments inventory.

**AN UNVOICED EXCLUSION -- GFP**

Some have asked – “Well, what about Government furnished Property of the Material classification -- Is that included under the MMAS?” MY Opinion – NO!

Why?

Because GFP is NOT “CHARGED OR ALLOCATED to a contract.” Now, let me get to the crux of one of the foundation elements of the MMAS – the allowance where material may be moved back and forth from Government contract to Government contract to contractor commercial work for consumption where ever it is must urgently needed – so long as costs are credited and debited within the same billing cycle (I will discuss the loan/payback issue later in this article).

If I can be slightly EMPHATIC here – you can’t do that with GFP!! [Note – if we can it changes the world of Government property in a VERY DRASTIC fashion! But that would take another article to detail all of the changes that would be wrought!]

Contractors do not “purchase” GFP – yes, it may be ACQUIRED through a Government system such as MILSTRIP or FEDSTRIP. But there MAY, repeat MAY be no exchange of monies as
there would be when a contractor buys material from a vendor. [NOTE: Yes, there are instance under FAR Part 51 where contractors may use Government Sources, but that in and of itself does not make the item acquired GFP.] I will talk about more GFP(Material) later in this paper.

O.k., on to the System Criteria of the MMAS

Discussion of the System Criteria

There are ten key elements within the MMAS – and upon close analysis they all touch upon property. DFARS 252.242-7004(d) states,

The MMAS shall have adequate internal controls to ensure system and data integrity, and shall--

(1) Have an adequate system description including policies, procedures, and operating instructions that comply with the FAR and Defense FAR Supplement;

(2) Ensure that costs of purchased and fabricated material charged or allocated to a contract are based on valid time-phased requirements as impacted by minimum/economic order quantity restrictions.

(i) A 98 percent bill of material accuracy and a 95 percent master production schedule accuracy are desirable as a goal in order to ensure that requirements are both valid and appropriately time-phased.

(ii) If systems have accuracy levels below these, the Contractor shall provide adequate evidence that—

(A) There is no material harm to the Government due to lower accuracy levels; and

(B) The cost to meet the accuracy goals is excessive in relation to the impact on the Government;

(3) Provide a mechanism to identify, report, and resolve system control weaknesses and manual override. Systems should identify operational exceptions, such as excess/residual inventory, as soon as known;

(4) Provide audit trails and maintain records (manual and those in machine-readable form) necessary to evaluate system logic and to verify through transaction testing that the system is operating as desired;

(5) Establish and maintain adequate levels of record accuracy, and include reconciliation of recorded inventory quantities to physical inventory by part number on a periodic basis. A 95 percent accuracy level is desirable. If systems have an accuracy level below 95 percent, the Contractor shall provide adequate evidence that—

(i) There is no material harm to the Government due to lower accuracy levels; and

(ii) The cost to meet the accuracy goal is excessive in relation to the impact on the Government;

(6) Provide detailed descriptions of circumstances that will result in manual or system generated transfers of parts;
(7) Maintain a consistent, equitable, and unbiased logic for costing of material transactions as follows:

   (i) The Contractor shall maintain and disclose written policies describing the transfer methodology and the loan/pay-back technique.

   (ii) The costing methodology may be standard or actual cost, or any of the inventory costing methods in 48 CFR 9904.411-50(b). The Contractor shall maintain consistency across all contract and customer types, and from accounting period to accounting period for initial charging and transfer charging.

   (iii) The system should transfer parts and associated costs within the same billing period. In the few instances where this may not be appropriate, the Contractor may accomplish the material transaction using a loan/pay-back technique. The “loan/pay-back technique” means that the physical part is moved temporarily from the contract, but the cost of the part remains on the contract. The procedures for the loan/pay-back technique must be approved by the ACO. When the technique is used, the Contractor shall have controls to ensure—

       (A) Parts are paid back expeditiously;

       (B) Procedures and controls are in place to correct any overbilling that might occur;

       (C) Monthly, at a minimum, identification of the borrowing contract and the date the part was borrowed; and

       (D) The cost of the replacement part is charged to the borrowing contract;

(8) Where allocations from common inventory accounts are used, have controls (in addition to those in paragraphs (e)(2) and (7) of this clause) to ensure that—

   (i) Reallocations and any credit due are processed no less frequently than the routine billing cycle;

   (ii) Inventories retained for requirements that are not under contract are not allocated to contracts; and

   (iii) Algorithms are maintained based on valid and current data;

(9) Have adequate controls to ensure that physically commingled inventories that may include material for which costs are charged or allocated to fixed-price, cost-reimbursement, and commercial contracts do not compromise requirements of any of the standards in paragraphs (e)(1) through (8) of this clause. Government-furnished material shall not be—

   (i) Physically commingled with other material; or

   (ii) Used on commercial work; and

(10) Be subjected to periodic internal reviews to ensure compliance with established policies and procedures.

Let’s address each of these criteria as they apply to Government Property.

(1) Have an adequate system description including policies, procedures, and operating instructions that comply with the FAR and Defense FAR Supplement;
Seems to be a reasonable request. We see the same requirement to have policies, procedures, and instructions within the Government property clause at 52.245-1(b).

(2) Ensure that costs of purchased and fabricated material charged or allocated to a contract are based on valid time-phased requirements as impacted by minimum/economic order quantity restrictions.
   (i) A 98 percent bill of material accuracy and a 95 percent master production schedule accuracy are desirable as a goal in order to ensure that requirements are both valid and appropriately time-phased.
   (ii) If systems have accuracy levels below these, the Contractor shall provide adequate evidence that—
       (A) There is no material harm to the Government due to lower accuracy levels;
       and
       (B) The cost to meet the accuracy goals is excessive in relation to the impact on the Government;

The issue of valid time phased requirements and EOQs are things that we also consider within our property world. Specifically, we expect the contractor in its acquisition process to manage the acquisition of all property to be accomplished in a timely fashion. The MMAS also has this requirement. Why? Because it is trying to prevent the contractor from going out and acquiring material, all material, at the start of the contract -- rather than acquiring it at a more appropriate time as the production work or any other work progresses. Notice there is the allowance for min/max buys or economic order quantity acquisitions. Now here is a slightly different area that property professionals may not be used to dealing with a bill of material in regard to validating acquisitions. But we are not generally involved with dealing with master production schedules that, in the past, has been industrial or production specialist’s realm.

(3) Provide a mechanism to identify, report, and resolve system control weaknesses and manual override. Systems should identify operational exceptions, such as excess/residual inventory, as soon as known;

Now this area gets a little more difficult. To understand the constructs here of system control weaknesses you have to understand all of the elements that are embedded within an MRP system. These include:

   Bills of material
   Master production schedules
   Engineering change control
   Pegging requirements (Soft pegging versus Hard Pegging)
   Gross requirements
   Net requirements.

We, in the property community, are or should be familiar with some of these are terms. Others, are terms that we need to study further to completely understand how an MRP or
in this case and MMAS works. But note the last item with in this criterion. It gives us an operational exception, i.e., of excess or residual inventory. All of us within the government property community understand this construct as we have our disposition and disposal requirements set forth both in the government property clause as well as FAR and DFARS 45.6 and 245.6, respectively. And this is one of those areas that I believe property has as a sole function -- declaration of excess and disposal of Government property. I would doubt that the MMAS auditors, e.g., either from DCAA or DCMA have this as one of their areas of technical expertise. Quite clearly in this area we need both a Property Administrator and a Plant Clearance Officer.

(4) Provide audit trails and maintain records (manual and those in machine-readable form) necessary to evaluate system logic and to verify through transaction testing that the system is operating as desired;

Once again, here is another area in which the Property Administrator (PA) has the competence and capability to evaluate the adequacy of this criterion. PAs and contractor property professionals clearly understand the concept of an audit trail and clearly understand the concept of transaction testing due to the requirements of the GP clause 52.245–1 – specifically paragraph (f)(1)(iii)(A) which states “property records shall enable a complete, current, auditable record of all transactions…”

(5) Establish and maintain adequate levels of record accuracy, and include reconciliation of recorded inventory quantities to physical inventory by part number on a periodic basis. A 95 percent accuracy level is desirable. If systems have an accuracy level below 95 percent, the Contractor shall provide adequate evidence that—

(i) There is no material harm to the Government due to lower accuracy levels; and

(ii) The cost to meet the accuracy goal is excessive in relation to the impact on the Government;

Ahhhhh, a physical inventory requirement! One of the life’s blood requirements of a property management system. Understanding the requirement for a physical inventory and the various methodologies available, as well as the numerous industry leading practices and voluntary consensus standards that exist, are also the bedrock of a property professional. Yet here the MMAS requires a 95 percent accuracy level. This minimally differs from our 90 percent confidence level that is stipulated in various DOD manuals. One is an arithmetic calculation, the 95% accuracy level, the other is an algebraic computation based upon statistical sampling, the statistical confidence level. There are also two subparagraphs to this criterion -- one talks about material harm to the government the other as to excessive cost. The material harm paragraph we, in the property community, have already addressed through the clause found at DFARS 252.245-7002. This clause provides guidance to both the government and contractor in regard to normal and reasonable inventory adjustments. It clarifies this as losses of low risk consumable material, and states that such losses are typically a product of normal process variation. Once again we see the close into relationship between the MMAS and the Government property clauses. It is critical that any auditor understand this
relationship, and understand this requirement, lest they impose a higher standard that is not contractually required.

(6) Provide detailed descriptions of circumstances that will result in manual or system generated transfers of parts:
   (i) The Contractor shall maintain and disclose written policies describing the transfer methodology and the loan/pay-back technique.
   (ii) The costing methodology may be standard or actual cost, or any of the inventory costing methods in 48 CFR 9904.411-50(b). The Contractor shall maintain consistency across all contract and customer types, and from accounting period to accounting period for initial charging and transfer charging.
   (iii) The system should transfer parts and associated costs within the same billing period. In the few instances where this may not be appropriate, the Contractor may accomplish the material transaction using a loan/pay-back technique. The “loan/pay-back technique” means that the physical part is moved temporarily from the contract, but the cost of the part remains on the contract. The procedures for the loan/pay-back technique must be approved by the ACO. When the technique is used, the Contractor shall have controls to ensure—
      (A) Parts are paid back expeditiously;
      (B) Procedures and controls are in place to correct any overbilling that might occur;
      (C) Monthly, at a minimum, identification of the borrowing contract and the date the part was borrowed; and
      (D) The cost of the replacement part is charged to the borrowing contract;

Historically, the PA understood the requirements to transfer parts. Traditionally, this required either two contract modifications, one to losing contract one to the gaining contract, or a credit/debit system. Here we see that these are now accomplished without the benefit of a contract modification. No contract modification is required to either the losing or the gaining contract. It is all part of that process and again is the beauty of the MMAS -- it removes the administrative burden at multiple levels and allows an automated process with its algorithms to run unimpeded.

(7) Maintain a consistent, equitable, and unbiased logic for costing of material transactions as follows:

Pretty simple and straightforward here, the Government is looking for fair treatment. It does not expect to be unjustly enriched through this process, by the same token it does not expect the contractor to be unjustly enriched. And though I have not copied all of the (7) requirements there is a great deal of discussion regarding the costing issues. Here is where Government furnished property being included in the MMAS could be slightly problematic. Not just for the costing issues but the UID issues as well required by DFARS 252.211–7007. For example, if we allow Government furnished material, say serially controlled parts, to be transferred under the MMAS, with the UID registry have to be updated every time?

(8) Where allocations from common inventory accounts are used, have controls (in addition to those in paragraphs (e)(2) and (7) of this clause) to ensure that—
Again I have truncated this paragraph as there is great detail their regarding how costs are to be handled. As we have seen in the previous criteria the cost issue and the transferring of these costs, and the allocation of these costs is paramount within the MMAS.

(9) Have adequate controls to ensure that physically commingled inventories that may include material for which costs are charged or allocated to fixed-price, cost-reimbursement, and commercial contracts do not compromise requirements of any of the standards in paragraphs (e)(1) through (8) of this clause. Government-furnished material shall not be—
   (i) Physically commingled with other material; or
   (ii) Used on commercial work;

And one more time we see an area that historically has been the purview of the PA. If we were to look at the Government property clause, FAR 52.245-1(f) there are two references to commingling:
   (vii) Relief of stewardship responsibility and liability, requires that the contract provide us in their reporting of any loss, acknowledgment if there was any commingled material involved with the loss.
   (viii) Utilizing Government property.

(B) Unless otherwise authorized in this contract or by the Property Administrator the Contractor shall not commingle Government material with material not owned by the Government.

Here we see that it is the PA who has the authority to authorize the commingling of Government material with contractor material. Now this even is more far reaching than the MMAS in that it could allow the commingling of GFP with contractor material -- which the MMAS does not allow. So, it is critical that the reader of the GP clause understand its interaction with the MMAS clause. And that the MMAS clause authorizes the contractor to commingle -- and they do not need the PA’s permission. The MMAS clause provides that overarching authority. But, it is also critical to note that GFP of the material classification cannot be co-mingled and cannot be used on commercial work.

COMMENTARY ON GFP OF THE MATERIAL CLASSIFICATION UNDER THE MMAS.
Okay, so a personal observation here. The intent, the pure intent, of an MRP or an MRPII or an MMAS is for the use of all material, regardless of ownership, on the work that most urgently needs it. It would be logical to carry this concept through for all types, really ownership of material. But here we fence and segregate GFP from that potential consumption -- which in essence defeats the power of the MMAS. There are even more critical issues that should dissuade the inclusion of GFP of the Material classification (Which I will call GFM) under the MMAS.

Another concern, the issue of GFM being charged or allocated. GFM, generally – though there are always exceptions, does not have a “charge” to it. Yes, it has an acquisition cost – but not a “charge” that can be credited/debited.
GFM cannot be used on Commercial work. Once again, one of the real powers of the MMAS – Material can be used regardless of ownership, i.e., Title. GFM is PROHIBITED from being used on commercial work. So the MMAS is a moot system when it comes to GFM.

I have a concern about the use of GFM across contract lines. If I am a contractor with multiple activity contracts, i.e., Army, Navy, Air Force – and I have an item of GFM under the MMAS – it would appear that I CAN follow the protocols of the MMAS and use that GFM where it is most urgently needed. Historically, the movement of GFM across contract lines (Save for the MCCMCS discussed earlier) was NOT authorized and when authorized required contract modifications. Under the MMAS there is not requirement for contract mods for CAP – I would assume the same goes for GFM. Now, when dealing with CAP and its availability, all of the responsibility rests with the contractor. While for GFM, all of that responsibility for “timely delivery” rests with the Government. [Note: we could discuss the issue of Government Supply sources and the requirements of FAR 52.251-1 – but that would take a whole ‘nother article.] So, if GFM accountable to Contract #1 was then used on Contract #2 – and there were no replacement parts available from the Government – which Government contract would bear the cost of the “Equitable Adjustment” claimed by the contractor when one of the contracts does not have the GFM? If we were to include GFM under the MMAS – it can get very messy.

Item Unique identifiers also pose a problem. Many of the items of GFM were initially considered the end item deliverables of other contracts. As such, many of them will be serialized, many of them will be over $5,000 – and as such covered by the DFARS Clause at 252.211-7003, Entitled Item Identification And Valuation (Jun 2011). This clause imposes numerous requirements regarding the use of unique item identifiers, and the commensurate registration of various bits of data into the IUD Registry. If GFM is included under the MMAS, I, for one, will be VERY interested to see how the contractors are going to update the Registry every time an allocation is made to another contract than the one under which the GFM was originally furnished.

Therefore, for this reason, and previous reasons given, I do not believe that it GFM should be included within the framework of the MMAS. Now, I am a firm believer in natural consequences. If we do consider GFM to be included in the MMAS then we must address the critical concerns of costing, UID applications, and commercial use.

(10) Be subjected to periodic internal reviews to ensure compliance with established policies and procedures.

Lastly, periodic internal reviews. Again this is nothing new to the PA or to the contractor property professional. Since the advent of the 2007 FAR GP clause contractors have been required to perform their own self assessments -- including both contractor self-assessments as well as their subcontractor assessments.
MULTIPLE BUSINESS SYSTEMS THAT OVERLAP

I briefly mentioned the issue of the business systems rule (BSR) and here we have to dig a little bit deeper. If one were to go through a detailed analysis of the six business system rules we would find that there is an overlap amongst and between the various systems.

We have gone through some detailed analysis of the MMAS and I have tried to show you a few of those areas that overlap with the Government property management system (PMS), required by FAR 52.245-1. So, the MMAS and the PMS definitely overlap. But do any other systems overlap with the MMAS? I believe to other systems overlap with the MMAS. These are the Purchasing system and the Accounting system both of which are systems called out as business systems in the DFARS.

The Purchasing system impacts the MMAS because it is the driver for the materials that are going to go under the MMAS. The accounting system interfaces with the MMAS due to all of the charges that may be credited and debited under the MMAS. There must be very clear algorithms established and maintained under the accounting system to properly affect all of the hundreds or thousands or tens of thousands of credit/debit entries that are made during any period of time.

Here is a visualization of that overlap between Government property, Accounting, Purchasing systems, and the MMAS.

![Diagram of overlapping business systems](image-url)
CRITICAL ISSUES THAT NEED TO BE RESOLVED

Since the original publication of the MMAS I have always been of the opinion that the review of this system needs to be a team effort. And it would appear that the original DFARS language alluded to that relationship. Yet in more and more literature I am seeing that one agency or activity within an agency appears to take the lead to the detriment of other professionals, for example property professionals, being included in the reviews. And I know my friends will disagree with me and say there are safeguards built in to ensure the involvement of property management but sometimes we are left by the wayside. I do not want to see that happen and therefore I’d like to point out a few legitimate authorities that the property administrator (PA) has assigned to them.

First off, the team approach. DFARS 242.7202 Policy states,

(b) The cognizant contracting officer, in consultation with the auditor and functional specialist, if appropriate, shall—
   (1) Determine the acceptability of the contractor’s MMAS and approve or disapprove the system; and
   (2) Pursue correction of any deficiencies.

(c) In evaluating the acceptability of the contractor’s MMAS, the contracting officer, in consultation with the auditor and functional specialist, if appropriate, shall determine whether the contractor’s MMAS complies with the system criteria for an acceptable MMAS as prescribed in the clause at 252.242-7004, Material Management and Accounting System.

Now I have and highlighted the term “functional specialist” in the extract of the DFARS for a specific reason. The contracting officer must be aware of the skill set of the PA. They must be aware that the PA is the functional specialist when it comes to Government property, which includes Contractor Acquired Property (CAP) and which has material as one of the classifications under CAP. Without this knowledge the contracting officer may either ignore or forget about the PA. Quite clearly we understand that the auditor refers to those with the proper accounting expertise, generally DCAA. The MMAS is a rather complex system application -- and there are tons of companies that sell software applications that apply either an MRP, MRP II, or even an ERP systems approach and which may have modules that address the MMAS elements required by the MMAS clause. Therefore, it should not just be one group, for example the auditors, doing this review. Rather it must be a team effort -- with property being a critical team member and resource. Show you some of the more detailed into relationships between the MMAS and Government property.

Authorities of the PA within the MMAS

Physical Inventories and Adjustments

I previously addressed the element for physical inventories under the MMAS. I would like to dig a little bit deeper. Element number 5 under the MMAS provided us the guidance for physical inventory requirements. It stated, “(5) Establish and maintain adequate levels of record accuracy, and include reconciliation of recorded inventory quantities to physical inventory by part number on a periodic basis.”
We also have a requirement under the Government property clause, FAR 52.245 – 1, at paragraph (f)(1)(iv) which states, “(iv) Physical inventory. The Contractor shall periodically perform, record, and disclose physical inventory results.”

And we also have a DFARS requirement which addresses an issue under physical inventories. DFARS 252.245–7002 has an interesting “allowance” if I may use that word. It states in paragraph (b), “(2) Unless otherwise provided for in this contract, the requirements of paragraph (b)(1) of this clause do not apply to normal and reasonable inventory adjustments, i.e., losses of low-risk consumable material such as common hardware, as agreed to by the Contractor and the Government Property Administrator. Such losses are typically a product of normal process variation. The Contractor shall ensure that its property management system provides adequate management control measures, e.g., statistical process controls, as a means of managing such variation.

So we have three different references regarding Government property:
One under the MMAS
One under the Government property clause and,
One under a DFARS clause (relating to Loss Of Government Property).

So, which one is right?

They are all correct. But the individual or the team dealing with the MMAS must be aware of these requirements in three different locations less they try to apply their own knowledge of just one of these requirements. And I’m really driving at the activity or entity that will ultimately be responsible for auditing the MMAS. Without knowledge of the diverse Government property sections an auditor may apply the MMAS without knowing or having an intimate knowledge of Government property -- and that is where we, as Property Professionals, need to help them.

Let’s talk about one other area. Note that in the previously mentioned DFARS loss clause, DFARS 252.245-7002, the PA was given a specific authority. Under this clause there is a negotiated agreement between the PA and the contractor as to what is considered a “normal and reasonable inventory adjustment.” That is a PA authority -- not DCAA, not an MMAS team member from another occupational series -- it is again, a PA authority.

As a tangential point many property professionals ask the question, “Well, what is a ‘reasonable’ adjustment?” The MMAS provides an answer – an indication as to what the Government accepts or expects as a reasonable threshold. The MMAS Clause states, “A 95 percent accuracy level is desirable.”

So if we are looking for an objective, measurable quantification of “reasonable” the Government provides us a very simple answer. And then goes one step further by continuing in the clause with the statement, “If systems have an accuracy level below 95 percent, the Contractor shall provide adequate evidence that—

(i) There is no material harm to the Government due to lower accuracy levels; and
(ii) The cost to meet the accuracy goal is excessive in relation to the impact on the Government.

What is the Government trying to do here?
1. Establish a THRESHOLD as to an acceptable accuracy rate and
2. Allow for variance that DOES NO HARM to the Government.
In other words USE COMMON SENSE and an VALUE ADDED Perspective!

Liability

Let’s look at another PA authority – Liability, or more specifically the granting of “relief of stewardship responsibility and liability.” The PA has the authority to grant “relief of stewardship responsibility and liability.” Note that there is discussion of this in FAR 45.104 as well as in the GP Clause FAR 52.245-1(f)(1)(vii). You will have to trust me here as I cannot go into a lengthy discussion on liability in this paper. You can find numerous articles that I’ve written just on that topic by doing a simple Google web search.

The reason I bring up this issue is that there is no discussion of liability under the MMAS. Again, it is one of those areas where the individual responsible for the MMAS must have depth and breadth of coverage. The liability provisions of the GP clause can be easily misapplied. And under the MMAS we have to remember that there is more than just Government property, there is also Progress Payments Inventory, which has a different set of liability provisions. So there could be applications of different liability provisions – Government property, Progress Payments Inventory, and contractor inventory (over which, from a liability standpoint, we in the Government have no purview).

Receipt and Issue – Obsolete allowance or still needed?

And I have to cover one last vexatious issue. Within the Government property community and our regulatory framework, i.e., the FAR, we have grown comfortable using a subsystem for managing Government material called the “Receipt and Issue System.” It is briefly discussed in FAR 52.245-1(f)(1)(iii)(B) where it states, “Use of a Receipt and Issue System for Government Material. When approved by the Property Administrator, the Contractor may maintain, in lieu of formal property records, a file of appropriately cross-referenced documents evidencing receipt, issue, and use of material that is issued for immediate consumption.”

The question has been asked, “Is this still a valid system allowance?” I believe in limited instances it is. So let’s talk about normal occurrence first and then the exceptions. Normal occurrence – ALL material, Government material, of the CAP origin, should go through the MMAS. Why? Because in most environments there will be a bill of materials and a master production schedule and the requirements, the elements of the MMAS can be met.

But, there are instances, in my opinion, where the MMAS does not fit. Let me provide a few examples.
Example #1 -- a repair situation. An item of Government property has broken down, say a piece of Special Test Equipment. It needs a repair part. There is no master production schedule for this item -- it is not being produced -- it is being repaired or is in the need of repair. There is no bill of materials for the production of an end item it is a broken part from a larger unit. As such, this would be an exception to the MMAS that would easily fit under the authority of the “Receipt and Issue System.”

Example #2 -- a research and development situation. An engineer or a scientist is doing some pure scientific research. He or she has no blueprint, has no bill of material, has no master production schedule – he or she needs certain items and they have informed the purchasing agent to acquire them. Once again these are items that may fall out of and create an exception to the MMAS. [I am sure that Joe Orlicky or George Plossl would disagree with this comment, but they are not Government property experts.]

So, might there be exceptions to the MMAS where a “Receipt and Issue System” could be used? Again in my opinion - absolutely! But, the norm, the everyday situation for acquiring and consuming material should be under the MMAS.

Disposition of Government Property

Though the intent of the MMAS (As well as MRP and MRPII systems) is to reduce to the maximum extent possible any excess – there will be instances where excess material exists. More specifically excess material of the Contractor Acquired Property (CAP) origin – and of course, that CAP has its title in the Government.

Standard # 3 states, “Systems should identify operational exceptions, such as excess/residual inventory, as soon as known;”
So, the MMAS addresses the issue of “excess/residual.” And, it is hoped that the contractor, through the MMAS can reduce or near eliminate any excess – through proper allocation of that material and movement by the crediting and debiting of the associated costs. But, if that doesn’t happen – what happens to the excess/residual CAP Material? Ahhhh, it has to go through the Plant Clearance Process. The Government Property Clause FAR 52.245-1(j) as well as DFARS 252.245-7004 entitled Reporting, Reutilization, And Disposal (Apr 2012) directs the contractor in regard to disposition reporting – the FAR provides the fundamental requirements while the DFARS clause directs the use of the Plant Clearance Automated Reutilization Screening System (PCARSS).

Bottom line – once again the Property Professional is intertwined with the MMAS – but this time it is the Plant Clearance Officer (PLCO) who has the AUTHORITY to direct disposition.

CLOSURE

In this article I have tried to walk you through a little bit of the history of the MMAS, and its commercial predecessors. I have tried to provide you an analysis of the system criteria or elements or standards that are embedded within the MMAS. I’ve talked about the MMAS as one
of the business system rules for the Department of Defense. I’ve talked about the PA’s roles and responsibilities as they have related to other systems, more specifically the Property Management System. And I have tried to discuss a few of the strange situations that may arise under the MMAS and its relationship with other systems and activities. Ladies and gentlemen, my best wishes to you in applying an MMAS

Dr. Douglas N. Goetz 937-754-1811
GP Consultants LLC GPDOCTOR@ATT.NET
WWW.GOVERNMENT-PROPERTY.COM

REFERENCES
