

CHAPTER 5

QUALITY ASSURANCEA. THE QUALITY ASSURANCE LETTER OF INSTRUCTION (QALI)

1. The Objectives of the QALI. QALIs provide essential requirements and instructions for accepting conventional ammunition contract end items, components, and other associated ammunition materiel. Sufficient uniformity must be employed to ensure the effectiveness of the QA efforts of the Military Service commands and improve the interface of Government and industry producers.

2. Preparing the QALI

a. Military Service commands shall use the format in figure 5-1 to prepare the QALI.

b. Special or extraordinary QALI requirements shall be incorporated in the QALI format (figure 5-1) and shall be identified specifically as special or extraordinary.

c. When MIPRs are initiated for procurement, the arrangements for preparing and issuing the QALI shall be contained in the MIPRs.

3. QALI Preparer. The following organizations are the Military Service commands responsible for ensuring the preparation of QALIs:

- a. AMCCOM .
- b. Naval Sea Systems Command and Naval Air Systems Command.
- c. AD.
- d. Ogden Air Logistics Center.

4. Issuing the QALI

a. The following procedures apply to procurements initiated by MIPRs:

(1) A QALI shall be prepared in the figure 5-1 format by the requiring agency or designated representative.

FROM : (Agency)

TO: (CAO designated in the contract)

SUBJ: QALI (Quality Assurance Letter of Instruction) for
(Product)
on Contract (Contract Number)
with (Contractor)

1. This QALI has been prepared by (Agency)

If further information is required, contact (Point of contact within the agency)

Telephone _____ or AUTOVON _____

2. Initial actions required are:

a. Acknowledgment of this QALI shall be sent to (Agency) within 15 working days after receipt. Your acknowledgment is an indication that sufficient manpower is available. In your **acknowledgment**, include any questions or proposed modification to this QALI.

b. Within 30 working days after receipt of this QALI, the QAR shall forward a copy of the completed DD Form 1904 (Contract Review and Planning Document) to (Agency).

3. POA actions for subject item are to be conducted according to DLAM 8200.1 and the instruction contained therein.

4. QA Post-Award Conference as defined by DLAM 8200.1 (is, is not) requested by (Agency). QA personnel from (Agency) (will, will not) participate in this conference and will provide agenda items, as necessary, to your office for planning purposes before the conference.

5. Mandatory product verification inspection is requested for the following: (To be provided by each Military Service)

- a. Identification of characteristics to be inspected or tested.
- b. Level of assembly where each characteristic is to be verified.
- c. Sampling techniques and sampling plans to be used.
- d. Method of verification, including any specific gaging, calibration, or instructions to be used.

Figure 5-1. Format for the QALI.

- e. First article or preproduction inspection/test instructions.
 - f. Production inspection/test instructions.
6. Nonconforming Supplies and Services
- a. Contractor's repair procedures are to be submitted to (Agency) for approval before performance or acceptance of material.
 - b. One of the following two statements shall apply to this paragraph:
 - (1) Copies of all waiver actions that involve acceptance of minor (Type II) nonconformances are to be provided to _____
 - (2) Authority to approve minor (Type II) nonconformances is withheld on this contract.
7. Other Data Submission. Upon completion, one copy each of the following is to be forwarded to _____ (Agency)
- a. Corrective actions for methods C, D, and E, when issued and **cleared** in accordance with DLAM 8200.1.
 - b. **DD Form 1716 (Procurement Package Recommendations/Deficiency Report)** prepared in accordance with DLAM 8200.1.
 - c. Additional special data submissions (if applicable).
8. Item Orientation
- a. The material (or item) under contract is an ammunition item **composed** of _____ that involves _____ Personnel assigned to accomplish the required procurement quality assurance actions shall have basic experience and background knowledge and qualifications in the commodity and manufacturing field described above.
 - b. The quality element of the CAO is invited to witness the testing of the first article sample and subsequent samples that will be tested at _____ Contact (Agency) _____, ATTN : _____, for additional information **and** arrangements, if desired.

Figure 5-1 (Con't). Format for the QALI.

(2) Either the requiring agency (or designated representative) or the procuring agency, as shown in the letter of designation of contract administration to the Contract Administration Office (CAO), shall issue the QALI to the CAO.

(3) If the QALI is issued by the procuring agency to the CAO, the requiring agency or designated representative shall provide the QALI to the procuring agency within 30 days of notification of contract award. The procuring agency shall issue the QALI to the CAO within 30 days of the letter of delegation of contract administration to the CAO.

(4) If the QALI is issued by the requiring agency or designated representative, the procuring agency shall authorize such issue from the requiring agency or designated representative with the letter of delegation of contract administration to the CAO. The requiring agency or designated representative shall issue the QALI to the CAO. The requiring agency or designated representative shall issue the QALI to the CAO within 30 days of receipt of the letter of delegation of contract administration to the CAO.

b. For a procurement not initiated by a MIPR, a QALI shall be prepared in the figure 5-1 format and issued to the CAO by the procuring agency or designated representative within 30 days of the letter of delegation of contract administration.

B. QA REQUIREMENTS ON MIPRs

This section discusses the specific QA requirements levied by the requiring agency on the procuring agency. Such QA requirements shall be included in the MIPR. These requirements shall identify the level of quality required for all inter-Service procured ammunition. Each requiring and procuring agency is responsible for developing specific procedures to implement this section.

1. Role of the Requiring Agency. The requiring agency shall include or attach QA requirements within or to the MIPR. The requiring agency QA activity shall review each MIPR using the checklist in figure 5-2 before issuing the MIPR.

2. Role of the Procuring Agency. The procuring agency shall acknowledge receipt and acceptance of QA requirements on DD Form 448-2, "Acceptance of MIPR," within 30 days of the date of the MIPR.

c. QA REQUIREMENTS FOR CONTRACTS

This section outlines the procedures for ensuring the definition and adequacy of quality provisions in the solicitation. The individual Military Service commands shall develop specific procedures to implement this section.

ITEM NOMENCLATURE: _____ DRAWING NO(S) : _____
 NSN (AS APPLICABLE): _____ SPECIFICATION NO(S) : _____
 EST RATE OF DELIVERY: _____
 PREPARED BY: _____ DATE: _____
 VERIFIED BY: _____

Speci fi ed			
	YES	NO	REMARKS
1.			Has the procurement document been coordinated with the responsible pro- urement/production, engineering, and other personnel having an input to the quality program?
2.			Are the items being procured adequately described by specification, part name, drawing/part number, model/type number?
3.			Have the appropriate quality provisions and quality clauses been specified covering each item being procured (FAR, Section 46)?
4.			Have additional QA requirements dictated by Military Service peculiar usage been identified and specified clearly and completely?
5.			Have specific inspections and other requirements been identified for inclusion in QALIs by the procuring agency?
6.			Have data requirements, both Government and contractor, been identified and included?

Figure 5-2. Sample MIPR QAR Checklist.

Specified			
	YES	NO	REMARKS
7.			Has the timeliness of data receipt been stipulated, particularly when requestor coordination is specified?
8.			Have the necessary coordination items been specified clearly such as Class 1 ECPs , waivers, and deviations?
9.			Has a requirement been included for the procuring activity to notify the requestor of reviews, audits, and conferences that the requestor deems appropriate?
10.			Has the QA point of contact of the requestor been identified, and has a requirement for the procuring activity to identify its QA point of contact been included?

Figure 5-2 (Con't). Sample MIPR QAR Checklist.

1. Quality Provisions in the Solicitation. Basic policy dictates that adequate quality provisions must be included in the solicitation. These provisions may be a part of the technical data or in the solicitation proper. Solicitations shall be reviewed by the requiring Military Service to ensure that adequate quality provisions are included and enforceable. This includes the quality provisions contained in the TDP.

2. Procedures for Ensuring Contracts Contain Adequate Quality Provisions

a. Before initial acquisition with a Government TDP, each Military Service command shall complete and authenticate the checklists shown in figures 5-3, 5-4, and 5-5.

b. Before releasing a solicitation for later or follow-on procurement, each Military Service command shall complete and authenticate the checklist shown in figure 5-6.

c. It is not necessary for all checklists to be reviewed by one particular activity. Use the one required for the necessary function.

d. The review to ensure conformance to some checklist items should be done within approximately 30 days before release of the solicitation. Otherwise, the review will not be effective. Each Military Service's internal procedures shall ensure that those items are identified and the review accomplished just before the solicitation is released.

e. Deficiencies identified during the review shall be documented and corrected. The adequacy of the corrective action shall be ascertained before the solicitation is released.

D. PROCUREMENT-RELATED QA FUNCTIONS

1. Standardization Objectives for QA. This section addresses the QA **aspects** of procurement and is meant **to** complement, rather than take the place of, policies and procedures established for procurement and production. The individual Military Service commands shall develop specific procedures to implement this section.

a. The maximum practicable standardization of **QA-related** methodology should be sought between the following:

(1) The requiring and procuring Military Services.

(2) The procuring Military Service and the CAO.

b. Eliminating significant differences in methodology among the Military Services will improve the contractor's implementation of contract quality provisions.

	YES	NO	COMMENTS
1. Have drawing and specification checklists (figures 5-4 and 5-5) been completed and observations noted?			
2. Has first article been included correctly?			
3. Have appropriate clauses in the FAR, Sections 46 and 52, been required?			
4. Are there special quality tasks that should be included in the documentation?			
5. Have the necessary quality data items been included on the DD Form 1423?			
6. Is there a work effort generating the data required on the DD Form 1423?			
7. Have provisions for inspection/test equipment been specified fully and clearly?			
8. If the lot size is limited by the item specification, is that limitation consistent with the production rate specified?			
9. Has the point for acceptance and inspection been defined clearly for all deliverable items including data?			
10. Have CM provisions been defined fully and correctly?			
11. Have the options provided for in Government specifications been exercised in the solicitation?			

Figure 5-3. Sample Solicitation Checklist.

Are drawings, lists of drawings, and drawing lists complete, current, and accurate as determined by the following:

	YES	NO	COMMENTS
1. Is material defined completely and clearly?			
2. Are processes defined completely and clearly?			
3. Are test requirements cited in specifications/standards clear and appropriate?			
4. If inspections/tests are to be conducted at some level of manufacture or assembly other than the completed drawing item, has that stage been specified clearly?			
5. Are notes clear , concise, and appropriate?			
6. Should the latest approved engineering changes be incorporated? Do they agree with the authorizing documents?			
7. Do drawings conform to the appropriate form and category requirements?			
8. Are Military Standards or Specifications or Industry Standards cited appropriately, defined specifically , and consistent with the item specification?			
9. Are tolerances consistent with actual applications requirements?			

Figure 5-4. Sample Drawing Checklist.

		YES	NO	REMARKS
l.	Is underlining utilized?			
m.	When there are extensive cross-references within specification, has a table been prepared?			
n.	Are figures, tables, graphs, pictures, etc., an integral part of the specification? Are they titled?			
o.	Are foldouts avoided?			
p.	Are footnotes avoided?			
q.	Does the specification include cost or other data that properly should be contained in the contract?			
r.	Are definitions in Section 6?			
s.	Is the security marking in accordance with DoD 5220.22-M?			
t.	Are the pages of the specification numbered and dated?			
u.	Is the Government or contractor activity identified in accordance with Cataloging Handbook H4?			
v.	Are the parts of a two-part specification identified on the title page?			
w*	Does the material, product, or service appear in the first part of the specification title?			
x.	Are the title modifiers in reverse order and separated by punctuation?			
y*	Is the type of specification included above the title?			
z.	Is the type of specification prepared on white bond paper suitable for microfilming?			

Figure 5-5 (Con't). Sample Product Specification Checklist.

III. General Requirements for the Sections of a Specification

1. Section 1: Scope
Is the scope a clear, concise abstract?

	YES	NO	REMARKS
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2. Section 2: Format

Is the format as follows:

- a. Specification
 - (1) Federal
 - (2) Military
 - (3) Other Government activity
- b. Standards
 - (1) Federal
 - (2) Military
 - (3) Other Government activity
- c. Drawings - Number and Title
- d. Other Publications
 - (1) Manuals
 - (2) Regulations
 - (3) Handbooks
 - (4) Bulletins
 - (5) Etc.
- e. **Is** each and every document listed herein referenced in the body of the specification?
- f. Are referenced **specifications** still applicable and current?

3. Section 3: Requirements

- a. Are the essential **requirements** and descriptions that apply to performance, design, reliability, personnel, subsystem, etc., of the item, material, or process covered by this specification?

Figure 5-5 (Con't). Sample Product Specification Checklist.

		YES	NO	REMARKS
b.	Are these requirements the minimum acceptable, realistic, and attainable?			
c.	Are the following requirements specified adequately?			
	(1) Definition			
	(2) Characteristics			
	(3) Performance characteristics			
	(4) Physical characteristics			
	(5) Protective coating			
"	(6) Reliability			
	(7) Maintainability			
	(8) Environmental conditions			
	(9) Transportability			
	(10) Design and construction			
	(11) Material			
	(12) Toxicity			
	(13) Electromagnetic radiation			
	(14) Product markings			
	(15) Workmanship			
	(16) Interchangeability			
	(17) Safety			
	(18) Human engineering			
	(19) Documentation			
	(20) Logistics			
	(21) Personnel and training			
	(22) Characteristics of subsystems			
	(23) Precedence"			
	(24) Qualification (verification and/or validation)			
	(25) Standard Sample			
	(26) First Article			
4.	Section 4: <u>QA Provisions</u>			
a.	Has the responsibility for inspection been specified properly?			

Figure 5-5 (Con't). Sample Product Specification Checklist.

	YES	NO	REMARKS
b. If provision is made for first article test, are rejection criteria for the test quantities specified?			
c. Do the quality conformance inspection and tests include the following?			
(1) Paragraph defining lot formation?			
(2) An examinations paragraph?			
(3) A systematic classification of critical, major, and minor defects as defined in MIL-STD 109, and an appropriate inspection method for each?			
(4) Testing and test methods paragraphs?			
(5) Are there provisions for verification inspection especially for critical and major defects 100 percent inspected visually?			
(6) Are acceptance and rejection criteria specified for all classified defects and for all tests?			
(7) Have group AQLs been assigned properly?			
(8) Are AQLs assigned consistent with specified performance requirements?			
d. Has the responsibility for design, maintenance, and approval of inspection equipment been addressed?			

Figure 5-5 (Con't). Sample Product Specification Checklist.

	YES	NO	REMARKS
e. Does the specification refer unnecessarily to other documents?			
f. Is there a verification of each requirement in Sections III and V included in this section?			
5. Section 5: <u>Preparation for Delivery</u>			
a. Is this a product specification? NOTE: If answer is negative, proceed to the next section.			
b. Is preservation, packaging, packing, and marking required?			
c. Are detailed requirements included by referencing applicable specifications and standards?			
6. Section 6: <u>Notes</u>			
Are the following items covered in this section?			
(1) Intended use			
(2) Ordering data			
(3) First article			
(4) Standard sample			
(5) Definitions			
(6) Cross-reference of classification			
(7) Miscellaneous			
7. Section 7: <u>Appendix</u>			
a. Is there a requirement for an appendix?			

Figure 5-5 (Con't). Sample Product Specification Checklist.

	YES	NO	REMARKS
b. Is there sufficient reference in the body of the specification to the data in the appendix?			
c. Is the appendix in the following format?			
(1) Scope			
(2) Heading			
(3) Reference			
d. Is this specification of sufficient length to require an index?			

Figure 5-5 (Con't). Sample Product Specification Checklist.

ITEM NOMENCLATURE: _____ DRAWING NO(S): _____
 NSN (AS APPLICABLE): _____ SPECIFICATION NO(S): _____
 EST RATE OF DELIVERY: _____ DATE : _____
 PREPARED BY: _____ VERIFIED BY: _____

	YES	NO	REMARKS
1. Has first article been included correctly?			
2. Have appropriate clauses in the FAR, Sections 46 and 52, been required?			
3. Are there special quality tasks that should be included in the documentation?			
4. Have the necessary quality data items been included on the DD Form 1423?			
5. Is there a work effort generating the data required on the DD Form 1423?			
6. Have provisions relative to inspection/test equipment been specified fully and clearly?			
7. If-the lot size is limited by the item specification, is that limitation consistent with the production rate specified?			
8. Has the point for acceptance hand inspection been defined clearly for all deliverable items including data?			
9. Have CM provisions been defined fully and correctly?			

Figure 5-6. Sample Reprocurement Checklist.

ITEM NOMENCLATURE: _____ DRAWING NO(S) : _____
 NSN (AS APPLICABLE): _____ SPECIFICATION NO(S): _____
 EST RATE OF DELIVERY: _____
 PREPARED BY: _____ DATE : _____
 VERIFIED BY: _____

	YES	NO	REMARKS
10. Have the options provided for in Government specifications been exercised in the solicitation?			
11. Should the latest approved engineering changes be incorporated? Do they agree with the authorizing documents?			
12. Are Military Standards or Specifications or Industry Standards cited appropriately, defined specifically, and consistent with the item specification?			
13. If subject to security classification, is classification according to current requirements? Are downgrading and espionage notations indicated?			

Figure 5-6 (Con't). Sample Reprocurement Checklist.

2. Policies for PQA

a. The procuring Military Services shall minimize product quality problems through the proper use of QA management techniques for procurement. These techniques include surveys, conferences, and other QA procedures specified in this manual.

b. The requirements and definitions in the FAR are the basic framework for conducting PQA.

c. When one Military Service performs the procurement function for another, the requiring Military Service must be invited to participate in the conferences and other QA activities mentioned above (subsection A.4.).

d. The requiring Military Service may request the activities mentioned above (subsection A.4.).

3. Methods of Ensuring PQA

a. The Preaward Surveys (PAS)

(1) The principal contracting officer (PCO) , considering the desires of the requiring Military Service, may request the CAO to perform a PAS or any portion of a PAS. The request is based on the PCO's determination that not enough information is available to assess the capability of a prospective contractor in such areas as experience, operational controls, technical equipment, QA skills, and others.

(2) The Military Services may designate a representative to take part in and help with the survey.

b. The Postaward Orientation Conference/Postaward QA Conference

(1) The postaward orientation conference may cover all elements of contract administration or any element individually, such as QA.

(2) The PCO, Acquisition or Program Manager, contractor, CAO, or requiring Military Service may request and take part in these conferences. This is especially important when the item is being produced by the contractor for the first time, when difficulties were experienced in previous procurements of the items, or there is a high risk of failure due to such factors as item complexity, urgent delivery schedule, or technological considerations. The FAR, Subpart 42.5, provides guidance and information on these conferences.

(3) Postaward conferences shall **be** held as soon as possible after the contract is awarded, if analysis of the contract or other information, such as PAS results, shows existing or potential problems that may affect performance. They also may be held when the contractor requests a conference.

(4) Whenever possible, the postaward QA conference **shall be** held along with the postaward orientation conference.

c. Other Conferences, Surveys, Audits, and Reviews. The procuring Military Service shall invite the requiring Military Service to take part in all quality-associated activities.

4 . DoD and Military QA. For additional QA information and guidance, refer to the following:

a. **MIL-STD 11676**, "Ammunition Data Card."

b. Department of the Army Supply Bulletin 742-1, "Ammunition Surveillance Procedures."

E. INDUSTRIAL AND WHOLESALE INVENTORY OPERATIONS

This section explains how QA applies to the wholesale inventory. It states the general requirements for **QA** and surveillance of storage, maintenance, preservation and packaging, and demilitarization and disposal operations. The instructions apply to the **SMCA-assigned** conventional **ammunition** industrial and wholesale inventories. The individual Military Service **commands** are responsible for developing specific procedures to implement this section.

1. Inventory QA Policies

a. The SMCA Quality Focal Point. The **AMCCOM** Product Assurance Directorate is the SMCA quality focal point for **all** quality matters pertaining to the wholesale inventory. All queries, **instructions**, and quality requirements shall be directed to the Product Assurance Directorate. The SMCA quality focal point shall issue all instructions to the storage activities, except for Air Force and Navy suspension and restriction notices that shall be distributed directly from these Military Services to the storage activity.

b. Identifying Quality Requirements. The SMCA shall apply the quality requirements, including the inspection and test procedures, of the CM Military Service or the primary using Military Service when the CM Military Service no longer uses materiel **involved**. Any additional owning Military Service requirements that exceed those specified by the CM Military Service shall be applied by the SMCA on a reimbursable

(cross-servicing) basis. This permits the SMCA storage facilities to use one inspection and test procedure (that of the CMS or primary using Military Service, as applicable) to satisfy QA requirements for the inventory of materiel owned by more than one Military Service. Using one inspection and test procedure greatly reduces the manpower and cost compared to maintaining records and performing separate inspections and tests to satisfy each of the owning Military Services' separate requirements.

c. What to Do If Military Service Inspection Procedures Do Not Exist or Are Inadequate. After confirming the absence of inspection procedures for CM Military Service or Military Service-owned items, the **SMCA shall apply SB 742-1**, "Ammunition Surveillance Procedures," until standard procedures are developed. If Military Service procedures do not meet SB 742-1 safety-in-storage procedures, both will be used.

d. Destructive Tests and Sample Sizes. The SMCA shall perform destructive tests on Military Service-owned items only when authorized specifically by the Military-Services. The Military Services recognize that routine visual inspections (receipt, cyclic, and **pre-issue**, as defined in **SB 742-1**) essentially are follow-on inspections, normally requiring only small sample sizes since the materiel has already had an acceptance inspection at the time of manufacture. Accordingly, for economical quality determinations for Military Service-developed items, the Military Services **will** try to limit their designated sample sizes to those shown in **SB 742-1**.

e. Condition Codes. The SMCA and the Military Services shall use the condition codes in Chapter 7, "Supply," to condition code Military Service assets.

f. Records and Reports. The SMCA shall use Army administrative record keeping and reporting procedures. A Depot Surveillance Record (**DSR**) Card shall be prepared for each lot on hand. A copy of each Quality Deficiency Report (**QDR**) and Ammunition Condition Report (**ACR**) shall **be provided** the Military Services by the **SMCA**. The SMCA shall also provide each Military Service a mechanized quarterly serviceability report containing all lots owned by the Service and the condition code, year of manufacture, and defect data for each lot by storage location. For each lot shipped to a Service customer (other than the Army), a copy of the DSR and the ADC shall be furnished to the customer by the shipping installation. To provide uniformity for the automated system, the computerized DSR cards, DA Form 3022-R, "Army Depot Surveillance Record" or equivalent AF TO Form 15, "Ammunition Serviceability and Location Record" reflecting **lot** surveillance history must include, as a minimum, all inspections, maintenance and monitoring actions, suspension restrictions, statement of condition encountered, actions taken, and assignment of condition codes. Under remarks, the annotations will include dates of actions, inspector's initials and any references to directed actions other than routine.

g. Military Service In-House Tests. Military Services conducting in-house tests shall request samples from the **SMCA's** supply and transportation elements for moving the material. Stockpile reliability test results shall be furnished to the **SMCA**. The SMCA shall ensure that the Military Services are provided a copy of stockpile reliability reports issued by the Army.

h. Planning and Forecasting Test Requirements. The Military Services and the SMCA shall confer at least annually to review the quality program and decide on projected **annual** test requirements. The Navy shall provide Quality Evaluation Test forecasts for **RSS&I** purposes in December of each year.

i. Financial Management. Financial management of inspections and tests shall be according to MIPR procedures. Refer to Chapter 6, section D., for detailed instructions.

j. Reporting Field Malfunctions. For field malfunction **reporting**, refer to Joint Military Service Document **NAVMATINST** 8025.1.

k. Identification of Items in the Wholesale Inventory. Each Military Service shall provide the SMCA a listing of items by nomenclature, NSN, and **DoDIC** (if applicable) for each item of issue in the wholesale inventory for which it is the configuration manager.

l. Mutual Support Between the Military Services and the SMCA. The **Military** Services and the SMCA shall be responsive to the needs of each **other, providing** needed guidance and support in a timely manner. The SMCA and the Military Services shall designate and exchange focal points and points of contact.

m. Security Assistance Shipments. Storage activities responsible for **making** a security assistance shipment shall coordinate with the **owning Military Service** initiating or directing the shipment for specific inspection requirements and clearance authorization. One copy of the ADC for each lot must accompany the shipment (see section H below) and one additional copy for each lot shall be mailed in accordance with DoD 5105.38-M.

2. Inventory QA Procedures

a. Storage Inspections and Tests. In the absence of inspection procedures for CM Military Service or Military Service-owned items, storage activities shall apply SB 742-1 procedures. The owning Military Service may ask for additional inspections above those specified by the CM Military Service or SB 742-1 subject to reimbursement. The following procedures apply to the specific kinds of inspections and tests:

(1) Receipt, Periodic, Preissue, Preservation and Packaging, Maintenance, Demilitarization, and Disposal Inspections. Inspection requirements shall be furnished by the owning Military Service to the **SMCA**, who will place the requirements on the **storage** activity. Destructive testing shall be performed only when specified by the owning Military Service.

(2) Military Service Unique Test Requirements. The owning Military Service shall notify the **SMCA** quality focal point to select samples and test or ship for Military Service unique test requirements of life cycle stockpile reliability testing. Test results and reports shall be shared with other using Military Services.

(3) Depot Function Testing (Destructive). The owning Military Service shall furnish test requirements to the SMCA who shall place the requirements on the storage activity. The **SMCA** shall coordinate the selection of lots for testing under the centralized test program. Storage activities shall conduct the tests and furnish the findings to the **SMCA**. The SMCA shall furnish a copy of each test report to the owning Military Service. Destructive testing shall be performed only when specified by the owning Military Service.

b. Deficiency Reporting Procedures

(1) Storage activities shall initiate and provide QDRs on unsatisfactory new material to the SMCA quality focal point for corrective action according to AR 702-7. The SMCA shall furnish a copy to, and keep the owning Military Service informed of, corrective actions on a timely basis.

(2) Storage activities shall initiate and provide ACRS on unserviceable materiel requiring maintenance or demilitarization to the **SMCA**, who will provide the ACR to the owning Military Service for disposition.

c. Suspension and Restriction Procedures

(1) Storage activities shall apply temporary suspension or restriction notices to wholesale inventory items, regardless of initiating Military Service or materiel ownership.

(2) If an owning Military Service does not concur in another Military Service's suspension or restriction action, a written notice must be furnished to the SMCA, who will fulfill the owning Military Service's requirements.

(3) When suspensions or restrictions are received from more than one Military Service on a specific item or lot, the notice from the Military Service owning the affected materiel will take precedence.

(4) When a conflict is noted between the different Military Services' disposition instructions, a written report of inconsistencies shall be furnished by the storing activity to the Military Service(s) and SMCA.

(5) Each item or lot shall be released only on an ownership basis on receipt of a release notice from the Military Service having ownership. A release notice from one Military Service shall not be applied to the same item or lot(s) in an ownership account of another Military Service.

(6) The application of release notices as shown above permits each Military Service the latitude of qualifying a release. Also, it prohibits the issue of materiel to the field or fleet before receipt of a release notice. (Army release notices are not received by Navy or Air Force retail units; Navy and Air Force release notices are not received by Army retail units.)

(7) The SMCA shall not permit removal of a suspension notice indicating materiel to be unsafe to store or move pending resolution by higher authority. If disagreements cannot be resolved, the SMCA shall refer the matter to the **DDESB** for resolution.

d. Quality Assessments

(1) The Military Services may perform item-oriented quality assessments. The Military Services must coordinate with the **SMCA**, who will coordinate with the storage activity to arrange for the visit. The SMCA may accompany the Military Service. The Military Services recognize visits may sometimes have to be deferred due to operational problems or other considerations.

(2) The SMCA may conduct coordinated visits to the Military Services' quality assessment activities. The SMCA must coordinate with the Military Service's designated focal point, who will arrange for the visit. The SMCA recognizes visits may sometimes **have** to be deferred due to operational problems or other considerations.

F. LAP OPERATIONS

This section standardizes QA activities for LAP operations at GOGO and GOCO facilities. The procedures apply to the procurement of conventional ammunition assigned to the SMCA. The individual Military Service **commands** shall develop specific procedures to implement this section.

1. QA Responsibilities in the GOCO or GOGO Plant (LAP). The contractor (**GOCO**) or responsible elements of the GOGO shall perform those inspections of classifications of characteristics and those **tests** listed in the technical documentation. The Government element shall perform procurement QA in accordance with the FAR, Section 46.

2. Who Provides QA Requirements? The developing Military Service shall provide the QA requirements for the life cycle of the material to the requiring Military Service. The requiring Military Service shall furnish the QA provisions in the technical documentation or the **MIPRs**, including special inspection requirements.

3. QA Responsibilities of the Procuring Military Service. The procuring Military Service QA element shall provide direction on the necessary actions by the Government QA element (normally AAP personnel) for verification of LAP material conformance to the requiring Military Service **MIPRs**. The procuring Military Service QA element shall ensure compliance with the special inspection requirements provided by the requiring Military Service. **QALIs** are subject to challenge, based on plant experience, to the procuring Military Service QA element. The requiring Military Service shall make the final decision and provide its rationale.

4. Suspension and Restriction of Material (Condition Code Assignment and Use). Suspension and restriction of material shall be accomplished according to existing directives, and the procuring Military Service shall be the focal point for such actions. When applicable, the requiring Military Service shall provide direction to the procuring Military Service regarding the material.

5. Quality Deficiency Reporting. QORS (SF 368) are used to report quality deficiency data. The procuring Military Service shall use the procedures and format in DoD **Directive 4155.1** for reporting quality deficiency data. The procuring Military Service shall coordinate with and provide advance copies of QDRs to the requiring Military Service. When applicable, the requiring Military Service **shall** provide disposition instructions and **recommended** corrective action.

6. First Article, Acceptance, and Ballistic Testing. The contractor (**GOCO**) or the responsible elements of the GOGO shall ensure **accomplishment of** all first article, lot acceptance, and ballistic testing. The Government QA element shall monitor the system and verify, as required. Coordination of the testing and final acceptance **shall** be made by the procuring Military Service QA element, based on test reports.

7. In-Process Inspection and Testing Equipment. The contractor (**GOCO**) or the responsible elements of the GOGO shall design and acquire in-process inspection and testing equipment. Exceptions must be cited in the technical documentation or **MIPR** by the requiring Military Service.

8. Mandatory Process Control Requirements. Any mandatory process control requirements shall be stated in the technical documentation. When applicable, certified personnel requirements for special processes (such as plating, soldering, or welding) shall be stated in the **MIPR**.

9. Quality Inspection and Audits. The requiring Military Service may request audits according to DoD Directives and the FAR. The procuring Military Service shall encourage participation by the requiring Military Service in their audits and provide audit results to the requiring Military Service.

10. Reporting and Feedback of Quality Data. When quality data is requested by the requiring Military Service, the requirement for quality data reporting shall be stated in the **MIPR**.

11. Configuration Control of Waivers, Deviations, and ECPs. The LAP **plant** shall submit each **request** for waiver, deviation, or ECP **according** to **MIL-STD 481** to the procuring Military Service, with a copy to the requiring Military Service ISEA. The ISEA shall coordinate within its Military Service and with the procuring Military Service. The ISEA shall provide comments, recommendations, and disposition (approval or disapproval) to the procuring Military Service, which will notify the contractor of disposition.

G. ACCEPTANCE TEST AND INSPECTION EQUIPMENT

This section outlines procedures for using acceptance test and inspection equipment to ensure ammunition quality during the procurement, production, maintenance, and surveillance functions of the wholesale inventory phases of its life cycle. Each DoD activity with responsibilities in this section shall develop specific procedures to implement them.

1. Development and Procurement Policies

a. The Military Service with overall CM responsibility for an ammunition item determines the necessity for and specifies special test and inspection equipment to verify and assess the quality requirements of the **ammunition** item during production, procurement, maintenance, and surveillance functions of the wholesale inventory phase.

b. Changes to the specified special test and inspection equipment used to verify and assess the requirements of **ammunition** items require concurrence of the Military Service with overall CM responsibility for the ammunition.

c. The Military Service having overall CM responsibility shall provide necessary acceptance test and inspection equipment information to the procuring Military Service. If the requiring Military Service is not the Military Service having CM, the information shall be provided to the requiring Military Service.

d. The procuring Military Service is responsible for procurement, calibration, inventory control, and storage of special test and inspection equipment to support procurement, production, maintenance, and surveillance functions in the wholesale inventory.

e. The developing Military Service is responsible for design and design approval for special test and inspection equipment.

f. Records and Reports. The SMCA shall use Army administrative record keeping and reporting procedures. A depot Surveillance Record (DSR) Card shall be prepared for each lot on hand. A copy of each Quality Deficiency Report (QDR) and Ammunition Condition Report (ACR) shall be provided the Services by the SMCA. The SMCA shall also provide each Service a mechanized quarterly serviceability report containing all lots owned by the Service and the condition code, year of manufacture, and defect data for each lot by storage location. For each lot shipped to a Service customer (other than the Army), a copy of the DSR and the ADC will be furnished to the customer by the shipping installation. In order to provide uniformity for the automated system, the computerized DSR cards, DD Form 3022-R or equivalent AF TO Form 15, reflecting lot surveillance history must include, as a minimum, all inspections, maintenance and monitoring actions, suspension/restrictions, statement of conditions encountered, actions taken and assignment of condition codes. Under remarks, the annotations will include dates of actions, inspector's initials and any references to directed action other than routine.

2. Special Test and Inspection Equipment Procedures. Special test and inspection equipment required for contractor or loading and maintenance activity use shall be identified; provisions for its acquisition, calibration, maintenance, and final disposition shall be spelled out in the contract, load order, or MIPR.

a. **When the requiring, procuring, and CM Military Services** are the same and special test and inspection equipment is required for contractor or load activity use or specific provisions apply to standard test and inspection equipment, the technical agent of the CM Military Service shall instruct the procurement agent of the requirement or specific provisions before solicitation for the product.

b. When the requiring and CM Military Services are the same, but the procuring Military Service is different, the requiring Military Service shall furnish the procuring Military Service via the ordering MIPR all the requirements for special test and inspection equipment and specific provisions applicable to standard test and inspection equipment.

c. When the requiring Military Service is other than the procurement Military Service and CM Military Service, the CM Military Service shall furnish the requiring Military Service, along with the TDP, all the requirements for special test and inspection for the MIPR to be sent to the procuring Military Service.

d. When the requiring Military Service is other than the Military Service having overall CM responsibilities for the product, and the requiring Military Service desires to modify the quality provisions (including a requirement for special test and inspection equipment), the

requiring Military Service shall obtain concurrence from the Military Service responsible for CM of the product.

3. Calibration, Certification, Maintenance, and Disposition of Test and Inspection Equipment. The requiring Military Service shall submit, along with each **MIPR**, all requirements for acquisition, use, **calibration**, certification, maintenance, and final disposition of all test and inspection equipment. Each MIPR shall also include all requirements for test and inspection equipment to be specified in the QALI according to section A., above.

4. Review and Update of Special Test and Inspection Equipment. The requiring Military Service shall furnish to the CM Military Service its projected ammunition requirements for the review and update of special test and inspection equipment requirements. Based on the CM Military Service estimate, the procuring Military Service shall fund the CM Military Service (from requiring Military Service procurement funds) for the review and update of special test and inspection equipment needed to support pending procurement.

5. Determining Who Certifies Special Test and Inspection Equipment. The requiring Military Service shall specify in the MIPR the activity to perform certification of special test and inspection equipment. The procuring Military Service shall include a contract clause requiring the special test and inspection equipment produced to be submitted for certification to the activity specified in the **MIPR**.

6. Related DoD and Military Service Guidance. For additional policies and procedures for QA acceptance test and inspection equipment, refer to:

- a. MIL-STD 1167B, "Ammunition Data Card."
- b. DA SB 742-1, "Ammunition Surveillance Procedures."

H. ADCS

1. Mandatory Use of the ADC

a. Military Standard **1167B**, as supplemented by the JOCG **MOU** on **ADCs**, December 7, 1976, states that the standard has been approved by the DoD and is mandatory for use by the Departments of the Army, Navy, and Air Force.

b. An ADC for items of assembly and items of issue shall accompany each lot and serially numbered item of ammunition to its destination, whether within a Military Service, to another Military Service, or to another contractor. There are no exceptions, according to **MIL-STD 1167B**, paragraph 3.2. This policy also applies to FMS shipments of **ammunition**.

c. The requirements for AOCs shall be incorporated in ammunition procurement contracts on DD Form 1423, "Contract Data Requirements List."

2. Distribution of the ADC. One copy of each ADC shall be provided to the master file of the Military Service concerned, as follows:

a. U.S. Army Activities worldwide:

(1) Commander
U.S. Army Armament, Munitions, and Chemical Command
ATTN: **AMSMC-QAD(R)**
Rock Island, IL 61299-6000

(2) Commander
Ballistic Research Laboratory
ATTN: **AMSBR-XSG**
Aberdeen Proving Ground, MD 21005

b. U.S. Navy and U.S. Marine Corps Activities worldwide:

(1) Commander
Naval Sea Systems Command (**NAVAM** Pro Eng Cen)
Naval Weapons Support Center
Crane, IN 47522

(2) Commander
Naval Weapons Station
Concord, CA 94520

c. U.S. Air Force Activities worldwide:

Commander
Ogden Air Logistics Center
ATTN: **MMWRA**
Hill Air Force Base, UT 84056

d. Each Military Service may supplement the minimum distribution requirements to **suit** its needs."

I. QA CONTRACT REQUIREMENTS

This section specifies standard procedures for the requiring Military Service to submit QA contract requirements to the **SMCA**. Each DoD activity with responsibilities herein shall develop specific procedures for implementation.

1. Specifying QA Contract Requirements. The requiring Military Service shall specify QA contract requirements not identified in the technical **documentation**, but considered necessary by the requiring Military Service to control the product quality to the configuration

identity. These requirements either shall be included in the MIPR, attached to the technical documentation, or provided in separate correspondence to the SMCA product assurance element before initiation of AMSAR FL 87, October 1, 1973, or equivalent.

2. Processing QA Contract Requirements. The SMCA product assurance element shall, on request of the SMCA logistics engineering element, provide these QA contract requirements, along with those extracted from the review of the applicable technical documentation. The SMCA logistics engineering element shall consolidate the QA contract requirements from other SMCA elements and send them to the SMCA PCO for inclusion in the solicitation package.

3. Advising the Requiring Military Service. The SMCA product assurance element shall provide a copy of AMSAR FL 87, or equivalent, along with enclosures, to the requiring Military Service technical activity at the time of submittal to the SMCA logistics engineering element.

4. Requiring Military Service Comments. The requiring Military Service shall provide **comments** on the data provided to the SMCA product assurance element within 5 working days after receipt of the AMSAR FL 87, or equivalent. **Comments** received from the requiring Military Service by the SMCA product assurance element shall be provided to the PCO for incorporating in the solicitation.

J. FIRST ARTICLE AND PRODUCTION ACCEPTANCE TESTING CAPABILITY

Each Military Service shall maintain its existing first article acceptance testing (**FAAT**) and production acceptance testing facilities. If a Military Service plans to disestablish such a testing capability, it shall coordinate the disestablishment with the SMCA. A capability includes facilities, expertise, and software. Production acceptance testing should be accomplished in existing Military Service Test facilities, including development or stockpile testing, when **practicable**. When existing facilities in the developing Service are inadequate to support full scale production testing, the SMCA should be responsible for subject funding and **facilitization**. However, the developing Service is responsible for identifying the requirements and providing appropriate data at the yearly **R&D** reviews held by the Services to allow the SMCA to include the **facilitization** requirement in the planning and budget process.

1. Determining the Testing Requirement. The developing Military Service shall determine the test capability required for FAAT and production acceptance testing of its developed items.

2. Specify the Testing Requirement. All FAAT and production acceptance test capability requirements shall be specified in the MIPR by the requiring Military Service.

3. What to Do When a Test Capability is No Longer Needed. If the developing or requiring Military Service determines that a particular test capability will no longer be required by them and no longer made available for later procurements, the SMCA and the Military Service having that capability shall be advised. A coordinated plan for phase down of the work load of the test capability or the retention or disestablishment of the capability shall be established.

4. Responsible Military Service Commands. The following Military Service **Commands** are responsible for identifying the capability for FAAT and production acceptance testing:

- a. U.S. Army Armament, Munitions, and Chemical **Command.**
- b. Naval Sea Systems **Command.**
- c. Armament Division.
- d. Ogden Air Logistics Center.

K. SUSPENSION INFORMATION AFFECTING RETAIL ASSETS

1. Information Provided by the SMCA. The SMCA shall provide wholesale inventory data on the quantity and location for each suspended lot to the developing Military Service.

2. Suspension of Ammunition Common to Another Military Service. For suspension of Military Service-developed **ammunition common** to another Military Service, the ICP of each using Military Service shall furnish the quantity and location of each suspended lot to the developing Military Service. For assets held by multiple services, SMCA will ensure that all owning Services are aware of material suspensions. Owning Services will check against stock records to assess impact on asset readiness.

3. Suspension of All Other Ammunition. For all other suspensions, each Military Service **shall** notify the SMCA when the impact of a suspension could require coordination and appropriate action to support retail assets.

4. Where to Send Suspension Data. Send suspension data, as **appropriate**, to the following Military Service organizations:

- a. Army-developed items: **AMCCOM (AMSMC-QAS(R)).**
- b. Air Force-developed items: Ogden Air Logistics Center
(MMWRA).^b
- c. Navy-developed items:
 - (1) NAVSEA cognizance - NAVAMPROENGCEEN.

(2) **NAVAIR** cognizance for pyrotechnics - NAVWPNSUPPCEN, Crane.

(3) Other **NAVAIR** cognizance - **PMTC**, Point **Mugu**.

L. SERVICEABILITY REPORTING

The following information applies to the wholesale inventory of **conventional** ammunition items assigned to the SMCA and to **non-SMCA** items stored in CONUS Army depots and plants.

1. Serviceability Reporting Systems

a. The U.S. Army WARS Serviceability Module is the logistics management information system for serviceability reporting of conventional **ammunition** stored in CONUS Army depots and plants.

b. The AMC system is the vehicle for establishing and maintaining installation or base operations level surveillance accounts at the Army depots, Crane Army Ammunition Activity, Hawthorne Army Ammunition Plant, and **McAlester** Army **Ammunition** Plant.

c. The system provides a **summary level** report of the conventional **ammunition** lot accounts on a quarterly basis to the **WARS** data bank at **AMCCOM**. That data bank is the source of the Quarterly Serviceability Report to each Military Service, as defined in AR 700-22.

d. Each of the Military Services has established an interface point and system to receive its Quarterly Serviceability Report from the SMCA. These are as follows:

(1) Army: Quality Assurance Directorate, HQ, AMCCOM, Rock Island, IL 61299-6000 (Quality Assurance Life Cycle System).

(2) Navy: **Naval** Weapons Quality Engineering Center, Naval Weapons Support Center, Crane, IN 47522 (Quality Engineering System).

(3) Marine Corps: Commandant, U.S. Marine Corps (Code **LMG**), Washington, DC 20380 (Quality Assurance Operations).

(4) Air Force: Air Munitions Division, Materiel Management Directorate, Ogden ALC, Hill AFB, UT 84056 (DO 34A, Special Support, Stock Control, and Distribution System).

2. Responsibilities for Serviceability Reporting

a. The WARS Manager, **AMCCOM**, ATTN: **AMSMC-JS** (R), Rock Island Arsenal, IL 61299-6000, is **responsible** for the system management as defined in AR 700-22, including direction, **coordination, and** control of such overall systems' performance as receipt, evaluation, and determination of action on systems change proposals.

b. The Associate WARS Manager for the Serviceability Module AMCCOM, ATTN: **AMSMC-QAS(R)**, Rock Island, IL 61299-6000, is responsible for system compliance, performance, reporting of incidents and progress reports on reporting organizations' performance, data management, input processing, compliance with prescribed output media specifications, and delivery dates for the Serviceability Module.

c. The organizations in paragraph **L.1.d.**, above, are responsible for receipt, evaluation, and application of data, including the development of internal Military Service reports and the coordination and control of related efforts. They shall interface with the Associate WARS Manager on the Serviceability Module at least quarterly on receipt of the quarterly reports, or more frequently as necessary, to ensure an effective interface is being maintained. Proposals on the serviceability reports shall be submitted by them in writing for evaluation by the Associate WARS Manager for the Serviceability Module and final determination by the WARS Manager.

3. Serviceability Reporting Media and Distribution

a. Tape and hard copy media are available to each of the designated Military Service activities. The designated Military Service **activities may** decide to receive either tape or hard copy, or both. If the **hard copy** is desired, the number of copies is at the option of the designated Military Service activity.

b. The following represents the current tape options in effect, including the track and binary BPI specifications required for compatibility with the installed systems at the designated activities. The QA reports in the media specified shall be provided to the designated activities no later than the end of the month following the close of the reporting quarter.

<u>Designated Activity</u>	<u>Media</u>
Commander U.S. Army Armament, Munitions, and Chemical Command ATTN: AMSMC-QAS(R) Rock Island, IL 61299-6000	One tape-format IBM 360/ 365, 9 track 1600 BPI, and three copies of hard copy report.
Commandant HQ, U.S. Marine Corps ATTN: LM Washington, DC 20380	One tape-format IBM 360/ 365, 9 track 1600 BPI, and three copies of hard copy report.
Commander Ogden Air Logistics Center ATTN: MMWD Hill Air Force Base, UT 84056	One tape-formatted to 7 track, 556 BPI , and two copies of hard copy report.

Commander
Naval Weapons Support Center
ATTN : Code 3023
Crane, IN 47522

One tape-format IBM 360/
365, 9 track 1600 BPI.

c. The standard tape format for Army, Navy, and Marine Corps requirements is shown in figure 5-7, below. The special tape format for the Air Force to achieve compatibility with D0 34A is shown in figure 5-8, below.

1-3	Depot/Command Code (WARS)	69-74	4th Defect Code
4-6	B-14 (AMCCOM)	75	Type Storage
7	Q	76	Sec. Class.
8-11	DoDIC	77-88	1st LOT Number (Component Lot)
12-15	Federal Stock Class	89-90	Date of Manufacture (Year)
16-24	National Item Identification Number	91-92	Component Code Number
25-40	LOT Number	93-104	2nd LOT Number
41	Condition Code	105-106	Date of Manufacture (Year)
42-43	Date of Manufacture (Year)	107-108	Component ID Code
44-50	Quantity	109	Blank
51-56	1st Defect Code	110	Blank
57-62	2nd Defect Code	111	Ownership Code
63-68	3rd Defect Code	112-160	Blank

Figure 5-7. Standard Tape Format for Army, Navy, and Marine Corps (9 Track 1600 BPI).

1-3	Depot/Command Code (600-800 Series WARS)	61-66	2nd Defect Code
4-6	RIC FG5 (AF)	67-72	3rd Defect Code
7-8	QA (Type Card)	73-78	4th Defect Code
9-12	DoDIC	79-90	1st LOT Number (Component Lot)
13-16	Federal Stock Class	91-92	Date of Manufacture (Year)
17-25	National Item Identification Number	93-94	Component ID Code
26-41	LOT Number	95-106	2nd LOT Number
42	Condition Code	107-108	Year of Manufacture
43	Transaction Code	109-110	Component ID Code
44-47	Date of Manufacture, Year - Month	111-119	Blank
48-54	Quantity	120	Record Mark
55-60	1st Defect Code		

Figure 5-8. Air Force Tape Format (7 Track 556 **BPI**).