

NOT MEASUREMENT  
SENSITIVE

**MIL-STD-1168B**

**10 June 1998**

**SUPERSEDING**

**MIL-STD-1168A**

**28 February 1975**

# DEPARTMENT OF DEFENSE STANDARD PRACTICE

## AMMUNITION LOT NUMBERING AND AMMUNITION DATA CARD



AMSC A7313

FSC 1395

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

MIL-STD-1168B

FORWARD

1. This standard is approved for use by all Departments and Agencies of the Department of Defense (DoD).

2. The purpose of lot numbering ammunition items and creation of ammunition data cards as outlined herein is to provide the identification of homogeneous materiel necessary to assure accurate control of items during development and experimental stages; during the movement of items from production line to production line, from plant to plant, from plant to storage facilities; while at test facilities or in the field; for issue to the using services; to enable the proper establishment and maintenance of surveillance records; and to provide a means for properly identifying materiel when withdrawal of defective, deteriorated, hazardous or obsolete ammunition and explosive materiel from service is required.

3. The title of this standard has been changed from "Ammunition Lot Numbering" to "Ammunition Lot Numbering and Ammunition Data Card" to reflect consolidation with MIL-STD-1167.

4. Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, U.S. Army TACOM-ARDEC, ATTN: AMSTA-AR-QAW-P, Picatinny Arsenal, NJ 07806-5000, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

## MIL-STD-1168B

## CONTENTS

<u>PARAGRAPH</u>		<u>PAGE</u>
	<u>FOREWARD</u> .....	ii
1.	<u>SCOPE</u>	
1.1	Applications .....	1
1.2	Exceptions .....	1
2.	<u>APPLICABLE DOCUMENTS</u>	
2.1	General .....	1
2.2	Government documents .....	1
2.2.1	Specifications, standards, and handbooks ..	1
3.	<u>DEFINITIONS</u>	
3.1	Acronyms used in this standard .....	2
3.2	Ammunition (ammo) .....	2
3.3	Ammunition lot .....	3
3.4	Ammunition lot number .....	3
3.5	Ammunition lot suffix .....	3
3.6	Calibration lot .....	3
3.7	Complete rounds .....	3
3.8	Functional lot .....	4
3.9	Homogeneity/homogeneous materiel .....	4
3.10	Hybrid lot .....	4
3.11	Interfix number .....	4
3.12	Interfix series .....	4
3.13	Items of issue .....	5
3.14	Items of a similar nature .....	5
3.15	Loading line .....	5
3.16	Lot number .....	5
3.17	Lot suffix .....	5
3.18	Lotting concepts .....	5
3.19	Maintenance operations .....	5
3.20	Manufacturer's identification symbol ....	6
3.21	Modification .....	6
3.22	Month of production .....	6
3.23	Overhaul .....	6
3.24	Parent lot .....	7
3.25	Partial lot .....	7
3.26	Procuring service/activity .....	7
3.27	Production line .....	7
3.28	Reference lot .....	7
3.29	Regroup/regrouping .....	7
3.30	Renovation .....	8

## MIL-STD-1168B

## CONTENTS

<u>PARAGRAPH</u>		<u>PAGE</u>
3.31	Rework .....	8
3.32	Sequence number .....	8
3.33	Serial number .....	8
3.34	Year of production .....	8
4.	<u>GENERAL REQUIREMENTS</u>	
4.1	Description, use and responsibility for lot numbers .....	9
4.1.1	Manufacturer's identification symbol ....	10
4.1.1.1	Assignment of manufacturer's identification symbols .....	10
4.1.1.2	Responsibility for assigning manufacturer's identification symbols .	10
4.1.1.3	Responsibilities for correct use of manufacturer's identification symbols .	10
4.1.1.4	Listing of manufacturers and their identification symbols .....	11
4.1.1.5	Changes in manufacturer's identification symbols .....	11
4.1.1.6	Required changes in manufacturer's identification symbols .....	11
4.1.2	Year of production .....	12
4.1.3	Month of production .....	12
4.1.4	Lot interfix number .....	13
4.1.4.1	Assignment of lot interfix numbers .....	13
4.1.4.2	Responsibility for assigning interfix numbers .....	13
4.1.4.3	Responsibility for correctness and proper use of interfix numbers .....	13
4.1.4.4	Actions requiring changes in interfix number .....	14
4.1.4.4.1	For administrative purposes .....	14
4.1.4.4.1.1	Different interfix numbers .....	14
4.1.4.4.1.2	Concurrent manufacturing .....	14
4.1.4.4.1.3	Development .....	15
4.1.4.4.1.4	Same size or caliber items .....	16
4.1.4.4.1.4.1	Different type projectiles .....	16
4.1.4.4.1.4.2	Different type cartridge cases .....	16
4.1.4.4.1.4.3	Different rounds of the same caliber ....	16
4.1.4.4.1.4.4	Different type bombs .....	16
4.1.4.4.1.4.5	Example .....	16
4.1.4.4.1.5	Change in contract .....	17
4.1.4.4.1.6	Sequence number exceeds "999" .....	17
4.1.4.4.1.7	Change in manufacturer's identification symbol .....	17

## MIL-STD-1168B

## CONTENTS

<u>PARAGRAPH</u>		<u>PAGE</u>
4.1.4.4.2	For technical reasons .....	17
4.1.4.4.2.1	Interruptions .....	17
4.1.4.4.2.2	Dismantling operations .....	18
4.1.4.4.2.3	Two distinct lines .....	18
4.1.4.4.2.4	Two distinct parts of a line .....	18
4.1.4.4.2.5	Same item - different manufacturing methods .....	18
4.1.4.4.2.6	Explosives and chemicals .....	19
4.1.4.4.2.7	Production line changes .....	19
4.1.4.4.2.8	Merging production lines .....	19
4.1.4.4.3	Best interest of the government .....	20
4.1.4.5	Documenting changes in interfix number ..	20
4.1.5	Lot sequence number .....	20
4.1.5.1	Responsibilities for assignment of lot sequence numbers .....	20
4.1.5.2	Responsibilities for correctness and proper use of lot sequence numbers ....	21
4.1.5.3	Changes in lot sequence numbers .....	21
4.1.5.3.1	For administrative purposes .....	21
4.1.5.3.1.1	Time .....	21
4.1.5.3.1.2	Quantity .....	21
4.1.5.3.1.3	Same producer - same item .....	22
4.1.5.3.1.4	Change in manufacturer's identification symbol .....	22
4.1.5.3.2	For technical reasons .....	22
4.1.5.3.2.1	Interruptions .....	22
4.1.5.3.2.2	Change in lot interfix number .....	22
4.1.6	Ammunition lot suffix .....	22
4.2	Mandatory numbering of ammunition lots ..	23
4.3	Ammunition data cards .....	23
4.3.1	Applicability .....	23
4.3.1.1	Contractor preparation .....	23
4.3.1.2	Revised card .....	23
4.3.1.3	Accompany lot .....	24
4.3.1.4	Sample card submission .....	24
5.	<u>DETAILED REQUIREMENTS</u>	
5.1	Description and use of ammunition lot numbers under special conditions .....	24
5.1.1	Non-Standard and renovated lots .....	24
5.1.1.1	Experimental lots (The "E" lots) .....	25
5.1.1.2	First article lots (The "A" lots) .....	26
5.1.1.3	Functional packed lots (The "L" lots) ...	26
5.1.1.4	Hybrid lots (The "H" lots) .....	27

## MIL-STD-1168B

## CONTENTS

<u>PARAGRAPH</u>		<u>PAGE</u>
5.1.1.5	Manufacturer's production control lots (The "P" lots) .....	28
5.1.1.6	Master calibration component lots and master calibration lots (The "C" lots) .....	28
5.1.1.7	Reference lots (The "R" lots) .....	29
5.1.1.8	Special lots (The "S" lots) .....	30
5.1.1.9	Regrouped lots (The "G" lots) .....	30
5.1.1.10	Modified lots (The "M" lots) .....	31
5.1.1.11	Overhaul lots (The "V" lots) .....	31
5.1.2	Partial lot .....	32
5.1.3	Ammunition lot suffix .....	32
5.1.3.1	Rejected lots .....	32
5.1.3.2	Reworking .....	33
5.1.3.2.1	Reworking in the field .....	34
5.1.3.2.2	Reworking at depots .....	34
5.1.3.3	Lot suffixes during the rework .....	34
5.1.3.4	Facility request for a suffix .....	34
5.2	Propellant lot numbers .....	34
5.2.1	Reprocessed propellant lots .....	35
5.2.2	Reblended propellant lots .....	36
5.2.3	Reblended and reprocessed propellant lots .....	36
5.3	Marking of lot numbers on explosive components, inert components, complete rounds, and guided missiles .....	36
5.3.1	Marking drawings (for contractor's preparing drawing) .....	36
5.3.2	Explosive loaded components .....	37
5.3.3	Inert components .....	37
5.3.4	Complete assembled rounds .....	37
5.3.5	Guided missiles .....	37
5.4	Exceptions to use of certain letters as ammunition lot suffixes .....	38
5.5	Required use of complete lot number .....	38
5.6	Elimination of the "500 series" .....	38
5.7	Elimination of the use of "PG", "SP", "SR", "ST", etc., in lot numbers .....	38
5.8	Elimination of the use of "B", "R", and "RB" in propellant lot numbers .....	38
5.9	Documenting information pertinent to lots produced under special conditions .....	39
5.10	Ammunition data card specification and format .....	39
5.10.1	Data card format for inert items .....	39
5.10.2	Revised data cards .....	39

## MIL-STD-1168B

## CONTENTS

<u>PARAGRAPH</u>		<u>PAGE</u>
5.10.3	Ammunition data card program .....	39
5.10.4	Preparation instructions .....	39
5.11	Distribution of data cards .....	39
5.12	Cards enclosed with shipping document ...	39
5.13	Distribution of data diskette .....	40
5.14	Provisional card to the proving ground ..	40
5.15	Rejected lots .....	40
6.	<u>NOTES</u>	
6.1	Items .....	40
6.2	Historical information .....	40
6.3	"Ammunition manufacturers and their Symbols", MIL-STD-1461 .....	40
6.4	Method for obtaining required technical data .....	41
6.5	Procedure for requesting lot suffixes ...	41
6.6	Associated Data Item Descriptions (DIDs).	41
6.7	Method for acquiring ammunition data cards .....	41
6.8	Subject term (key word) listing .....	42
6.9	Changes from previous issue .....	42

MIL-STD-1168B

1. SCOPE

1.1 Applications. This standard establishes and describes the lot numbering system and ammunition data card preparation that shall be used to identify items of ammunition and explosive materiel, to include air frame items such as fins, during all phases of their life cycles.

1.2 Exceptions. The provisions of this standard do not cover the lot numbering system used on nuclear materiel, assemblies and associated parts designed specifically for nuclear applications.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3,4, and 5 of this standard. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3,4, and 5 of this standard, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto.

STANDARDS

DEPARTMENT OF DEFENSE

MIL-STD-1461 - Ammunition Manufacturers and  
Their Symbols

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

## MIL-STD-1168B

## 3. DEFINITIONS

3.1 Acronyms used in this standard. The acronyms used in this standard are defined as follows:

- a. ACO - Administrative Contracting Officer
- b. ADC - Ammunition Data Card
- c. DoD - Department of Defense
- d. GOCO - Government-Owned Contractor-Operated
- e. GOGO - Government-Owned Government-Operated
- f. LAP - Load, Assemble and Pack
- g. MPTS - Metal Parts
- h. NICP - National Inventory Control Point
- i. NMP - National Maintenance Point
- j. PCO - Procuring Contracting Officer
- k. PQM - Product Quality Manager
- l. QAR - Quality Assurance Representative
- m. USAF - United States Air Force

3.2 Ammunition (ammo). A generic term which includes all manner of missiles to be thrown against an enemy, such as, bullets, projectiles, rockets, cartridges, grenades, torpedoes, bombs and guided missiles with their necessary propellants, primers, fuzes, detonators and charges of conventional explosive, nuclear explosive, chemical or other materiels. In the "broadest sense" the term is not limited to those materiels to be thrown, nor to use against an enemy, but also will include all explosives, explosive devices, pyrotechnics and pyrotechnic devices. The purpose is not limited and includes in addition to direct use against an enemy, such uses as illumination, signaling, saluting, mining, digging, cutting, accelerating, decelerating, separating, catapulting personnel or materiel, operating or stopping mechanisms, demolition, decoying, non-lethal, practice, training, guarding, game hunting and just pure sport. All component parts thereof shall also be considered as ammunition.

## MIL-STD-1168B

3.3 Ammunition lot. A quantity of ammunition (complete rounds, components, propellants, etc.) which is manufactured or assembled by one producer under uniform conditions and which is expected to function in a uniform manner. An ammunition lot is designated and identified by assignment of an ammunition lot number. All materiel comprising an ammunition lot must be homogeneous.

3.4 Ammunition lot number. A code number systematically assigned to each ammunition lot at the time of manufacture, assembly or modification that uniquely identifies the particular ammunition lot.

3.5 Ammunition lot suffix. An alpha character added to the sequence portion of the ammunition lot number to denote a rework effecting a materiel change in the original lot, to identify reprocessed propellant lots, etc. Ammunition lot suffixes are always in capital letters and are applied sequentially starting with "A" and continuing through "Z". Use of some alpha characters are restricted or prohibited. These are listed in paragraph 5.4.

3.6 Calibration lot. A calibration lot serves as the current standard against which one or more reference lots or other calibration lots may be selected, except in the case of small arms where no calibration lot is used.

3.7 Complete rounds. An assemblage of explosive and non-explosive components designed to perform a specific function at the time and under the conditions desired. Also used interchangeably with "complete assembled rounds" and "round of ammunition". It should not be used interchangeably with "item of issue". All "items of issue" are not necessarily "complete rounds." Some examples of "complete rounds of ammunition" are:

- a. bomb - consisting of all component parts required to function the bomb once.
- b. fixed or semi-fixed - consisting of a primer, propelling charge, cartridge case, a projectile and a fuze except when solid projectiles are used.
- c. missile - consisting of complete warhead section and a missile body with its associated components and propellants.
- d. separate loading - consisting of a primer, propelling charge and except for blank ammunition, a projectile and a fuze.

## MIL-STD-1168B

3.8 Functional lot (functional pack of small arms ammunition). A quantity of two or more types of cartridges packed in an authorized combination as an item of issue for field use in a weapon system.

3.9 Homogeneity/homogeneous materiel. When all units of product in an ammunition lot have been produced by one manufacturer, in one unchanged process, under stable conditions of production, in accordance with the same drawings, the same specifications and any revisions thereto, a "state of homogeneity" shall be considered to exist. This means that the items of ammunition have been manufactured or assembled during a production process which has not been altered by innovation, changes in materiel sources, strikes retooling (other than that done due to routine changes to compensate for normal tool wear or breakage) or interruptions other than those due to the end of the shift, day or week.

3.10 Hybrid lot. A hybrid lot of ammunition is an item of issue lot consisting of components of various interfix numbers and manufacturers, in excess of the number permitted in the item of issue detailed specification. Hybrid lots will be numbered in accordance with the provisions contained in this standard. (Hybrid lots differ from regrouped lots in that the former deals with component lots while the latter deals with complete round lots).

3.11 Interfix number. A 3-digit number ranging from "001" to "999" placed between the month of production code letter and the sequence number. The interfix number is an integral part of the ammunition lot number and is designed to identify those lots in an interfix series which have been produced or assembled by the same manufacturer at the same location for the same item, made according to a specific design and manufacturing process using like materials in accordance with certain administrative procedures.

3.12 Interfix series. An interfix series is comprised of one (1) or more ammunition lots manufactured or assembled by the same producer under uniform conditions and which are expected to function in a uniform manner. The manufacturer's identification symbol and the interfix number remain as constants. The sequence number shall advance sequentially but shall not exceed "999". In most instances the month of production code will change

## MIL-STD-1168B

progressively within an interfix series. Occasionally the year of production will also change.

Example:           AMC97B006-001  
                       AMC97B006-002  
                       AMC97C006-003  
                       AMC97D006-004 etc.  
                       to AMC98A006-015

In this example, the interfix series is AMC97B006-001 through AMC98A006-015. The interfix number is "006".

3.13. Items of issue. A complete round or primary/major component which is issued to a field activity.

3.14 Items of a similar nature. Those items produced or assembled by the same manufacturer at the same plant which are basically the same but have been modified slightly, thereby permitting some variation in end product functioning. (Included are blanks, tracers, rounds produced for training purposes, etc.). Also included are those items of the same caliber or size which are manufactured or assembled at the same plant.

3.15 Loading line. (See production line - 3.27).

3.16 Lot number. (See ammunition lot number - 3.4).

3.17 Lot suffix. (See ammunition lot suffix - 3.5).

3.18 Lotting concepts. This incorporates the basic philosophy that the units of product comprising a lot of ammunition have been produced or assembled at the same plant under homogeneous conditions and subsequently numbered systematically to assure accurate identification and control of the lot and its major components during their entire life cycle. Moreover, it accepts the theory that all portions of the lot are reasonably identifiable or capable of being identified with the parent lot as long as the original lot number is retained in its basic form.

3.19 Maintenance operations. For purposes of this standard, maintenance operations shall be used to cover the broad spectrum of all operations involving the care and preservation of ammunition. For the most part, it will pertain to, but is not limited to, depot, field, arsenal and plant applications which encompass operations consisting of adjusting, cleaning, derusting, repainting, remarking, repackaging, reconditioning, reworking, renovating, modifying, overhauling, conversion, reprocessing, replacing, repairing, regrouping, ordinary maintenance, extensive maintenance, etc. In most instances,

## MIL-STD-1168B

maintenance operations will require the issuance of rework procedures, renovation instructions, maintenance directives, etc.

3.20 Manufacturer's identification symbol. A combination of one, two or three alpha characters assigned in a manner to indicate the unique identity and location of the arsenal, plant, depot, station, contractor, vendor, etc., which manufactured, assembled, renovated, modified, or loaded a specific item of ammunition or ammunition component. The manufacturer's identification symbol is an integral part of the ammunition lot number. It is the first entry of the lot number preceding the numeric code used to identify the year of production. The alpha characters shall always be all capital letters.

3.21 Modification. This operation is accomplished subsequent to the initial production and lotting, and consists of replacing, interchanging or alteration of faulty or deteriorated component parts with a component of a different model number or nomenclature, etc., thereby effecting a change in design, function or manufacturing procedure resulting in a loss of identification with the parent lot. The modification may be a direct result of engineering changes and specification revisions intended to change design or functional characteristics. In all cases, a new lot number will be issued. The manufacturer's identification symbol for the new lot number shall be that of the facility performing the modification. The lot interfix number assigned will be in accordance with 5.1.1.10. This change is necessary to insure that the materiel changes are clearly understood. Modification may or may not be performed when regrouping of lots is being accomplished. These operations are frequently referred to as conversion, extensive maintenance and extensive renovation.

3.22 Month of production. An alpha code to identify the month that manufacture, assembly or modification of the lot was initiated. This alpha code is placed directly between the year of production and the lot interfix number. It becomes an integral part of the ammunition lot number. A listing of the alpha codes assigned to identify the month of production are contained in 4.1.3.

3.23 Overhaul. The process of performing exterior maintenance, as required, on ammunition lots consisting of complete rounds and/or primary components which have been quality evaluated and found serviceable. This includes such operations as cleaning, removal of rust, corrosion or other foreign material from an item, repainting, remarking, etc.

## MIL-STD-1168B

3.24 Parent lot. The "original" or "basic" lot prior to any changes, modifications, renovations, etc., which result in either the addition of a lot suffix, a change in the lot interfix number or the assignment of a completely new lot number.

3.25 Partial lot. Partial lots are "sub-divisions" of normal ammunition lots. Usually they are of predetermined equal quantities or represent specific production time frames. A partial lot is not intended to be identified as an independent lot and must never be so considered.

3.26 Procuring service/activity. (Actual Buyer) A DOD Agency such as the Dept. of Air Force, Navy, Army, etc. which is assigned the responsibility for the acquisition of facilities, the obtaining of personnel, the awarding, issuance and execution of the procurement contracts, instruments and packages, as pertinent, used for the purchase of services, supplies or equipment, and performing post award functions not assigned to a Contract Administration Office (CAO).

3.27 Production line. (Loading line) A production line will be considered as a collection of benches, tools, etc., the products of which can be grouped into one production lot or a "series of production lots." A facility may have several lines, in a physical sense, but if their product can be grouped together into one lot or a "series of lots," the facility will be considered as having only one production line. However, if a facility produces two (2) or more lots concurrently and the distinction between the lots is one of the place or type of tools on which the lots were produced, then the facility is considered to have more than one production line.

3.28 Reference lot. A component lot or end item lot selected for use in ballistic tests where acceptance is based upon a comparison between the reference round performance and the test round performance. Reference lots are selected on the basis of their performance with that of the current calibration lot.

3.29 Regroup/regrouping. When two (2) or more complete round lots are combined to form one (1) lot, regardless of the type of maintenance operations which may or may not be performed in conjunction with the assemblage of these lots, this procedure shall be considered as regrouping. ("Regrouped lots" vary from "hybrid lots" in terms of dealing with complete round lots as opposed to component lots.)

## MIL-STD-1168B

3.30 Renovation. A general term which denotes the performance of any process, other than complete breakdown and re-assembly, required to render an existing item fully serviceable. Renovation includes rework, overhaul and modification.

3.31 Rework. The process of replacing one or more faulty or deteriorated components in an end item of issue with like components of the same nomenclature and model number. This includes repackaging and X-raying. In some instances, economics or other factors may permit a maintenance operation to be designated as a rework when components of different nomenclatures or model numbers are used to replace the original components or the end item purpose and function may have been altered. Reprocessing of propellant lots will be considered as a rework operation. All lots or quantities thereof which are reworked will be identified by the assignment of an ammunition lot number with appropriate alpha suffix in accordance with the provision of this standard. This addition is necessary to insure that the changes are clearly and readily recognized.

3.32 Sequence number. A number ranging from "001" to "999" placed after the interfix number. The sequence number is an integral part of the ammunition lot number and identifies the lot within the interfix series according to the sequence of production or assembly of the item.

3.33 Serial number. Number assigned to each lot produced in a consecutive manner in the order of manufacture or assembly or assigned in blocks to be applied in a consecutive manner in the order of manufacture or assembly for the applicable item(s) or lot(s). Serial numbers shall be assigned to those ammunition items consecutively produced requiring serialization control for each end item, component item or lot manufactured or assembled as specified by the procuring activity. In some instances, items requiring serialization are not lotted unless required by the procuring activity. Numbering of propellant lots, as detailed in this standard is an exception to this principle. Serial numbers shall not be repeated on the same part numbered item regardless of changes in lot numbers.

3.34 Year of production. A numeric code consisting of the last two (2) digits of the calendar year in which the manufacture, assembly or modification of the lot was initiated. This numeric code is placed directly between the manufacturer's identification symbol and the month of production code. It becomes an integral part of the ammunition lot number.

## MIL-STD-1168B

## 4. GENERAL REQUIREMENTS

4.1 Description, use and responsibility for lot numbers. For all ammunition end items and their components including small arms, chemicals, grenades, mines, pyrotechnics, etc., the ammunition lot number shall consist of a manufacturer's identification symbol, a numeric code showing the year of production, an alpha code representing the month of production, a lot interfix number followed by a hyphen, a lot sequence number and when necessary, an alpha character used as an ammunition lot suffix to denote a reworked lot. The ammunition lot number will not exceed fourteen (14) characters in length and no characters will be separated by spaces. The minimum number of characters used will be thirteen (13). If a one or two character manufacturer's identification code is used, the remaining positions of the three (3) character field will be filled by dashes (-), e.g. A-, AB-, etc. The following illustrates the construction of an ammunition lot number:

```

      AMC97D018-013B
      /  |  |  |  |  \
      a  b c d   e   f

```

- (a) Manufacturer's identification symbol.
- (b) Two (2) digit numeric code identifying the year of production.
- (c) A single alpha code signifying the month of production.
- (d) Lot interfix number.
- (e) Lot sequence number.
- (f) Ammunition lot suffix (the alpha suffix).

Section 5, "Detail Requirements" specifies exceptions to the foregoing system for numbering ammunition lots. The exceptions refer to nonstandard lots and those requiring special codes and are listed in 5.1. The exceptions are bulk propellant lots, propellant increment lots, certain types of propellant charge lots, master calibration lots, master calibration component lots, reference lots, first article test samples, experimental lots, manufacturer's production control lots, functional packed lots, hybrid lots regrouped lots, and "special lots".

## MIL-STD-1168B

4.1.1 Manufacturer's identification symbol. Manufacturer's identification symbols shall be all capital letters, except as noted in 4.1, and shall not exceed three (3) alpha characters. This symbol is a part of the ammunition lot number. It is used to identify the arsenal, plant, depot, station, private contractors, vendors, etc., which manufactured, assembled, renovated, modified or loaded the specific lot of ammunition. It is used in the marking of the ammunition and the ammunition packings to assure the accurate control of ammunition, ammunition components and explosive materiel during movement, storage, maintenance, issue and receipt transactions.

4.1.1.1 Assignment of manufacturer's identification symbols. Manufacturer's identification symbols will be assigned to each manufacturer of ammunition, ammunition components and explosive materiels. Different symbols for each plant will be assigned to those manufacturers who have more than one plant producing ammunition items for the Government.

Example: Aerojet - General Corp., Azusa, California -  
symbol "AJA,"  
Aerojet - General Corp., Sacramento, California -  
symbol "AJL,"  
Aerojet - General Corp., Fullerton, California -  
symbol "AJD,"  
Aerojet - General Corp., Solid Rocket Plant,  
Sacramento, California -  
symbol "AJS."

Different symbols will be assigned for individual plants when the same manufacturing concern has two or more different plants in the same city. These provisions apply also to those manufacturers who operate GOCO facilities in addition to producing ammunition items for the Government at privately owned facilities.

4.1.1.2 Responsibility for assigning manufacturer's identification symbols. Assignment of manufacturer's identification symbols for all services within the Department of Defense (DoD) is the responsibility of the United States Army Industrial Operations Command, AMSIO-QAA, Rock Island, IL 61299. It is the responsibility of this organization to assure that no manufacturer's identification symbols are duplicated.

4.1.1.3 Responsibilities for correct use of manufacturer's identification symbols. Each private contractor, GOGO and GOCO plant operation must be assigned a manufacturer's identification symbol prior to the start of production of component parts or assembly of complete round items. Assurance that each producer engaged in the manufacture or assembly of ammunition items is

## MIL-STD-1168B

assigned a symbol prior to the start of production and the proper use of the symbol during production will be the responsibility of the appropriate Product Quality Manager. The NICP/NMP Commodity Manager, responsible for issuing instructions and directives for reworks, renovations, modifications, etc. will also be responsible for assuring that each installation performing such operations uses the correct manufacturer's identification symbol at all times. Manufacturer's identification symbols can be obtained by request in accordance with procedures outlined in MIL-STD-1461.

4.1.1.4 Listing of manufacturers and their identification symbols. Manufacturers' identification symbols are published in MIL-STD-1461, titled "Ammunition Manufacturers and Their Symbols." An updated, completely revised standard will be published annually. This publication contains any and all symbols previously used by or assigned to a manufacturer, load plant, depot or other type of facility.

4.1.1.5 Changes in manufacturer's identification symbols. Whenever a manufacturer's identification symbol is changed by the assigning office, the next lot, reflecting the change in symbol, shall start with a new interfix number and a new sequence number in accordance with procedures specified in this document. (Example: A manufacturer with the basic identification symbol of AMC had manufactured lots AMC97G001-001 through AMC97A003-006, when the identification symbol was changed to "AMA." The next lot manufactured was numbered AMA97B001-001. The ammunition data cards for each of the lots shall be properly annotated to clearly explain the reasons for the changes. Changes in manufacturers' identification symbols are rare. Normally, there are three (3) basic reasons. They are as follows:

- a. When it is learned that a manufacturer's identification symbol is being duplicated by one or more producers; or
- b. When a manufacturer moves his operations from one city to another or closes out production from one facility to a distinctively different facility, even if they are in the same city; or
- c. When a business establishment changes names due to change of ownership, mergers, and the like.

4.1.1.6 Required changes in manufacturer's identification symbols. Use of the metal parts manufacturer's identification symbols by the GOCO loading plants shall not be permitted. LAP facilities shall affix their own manufacturer's identification symbols, the appropriate year of manufacture/assembly, month of production, lot interfix and sequence numbers to each lot

## MIL-STD-1168B

processed at their facility. The same applies to LAP plants processing propellants, propellant charges and other types of explosives with the exception of propellants used in single granulation propellant charges (see 5.2).

Example: Fuze, PI, BD, M509A1 MPTS - The metal parts producer's lot number is AAA97F007-001. The LAP facility loading the fuze shall rise its own symbol, year of production, month of production, lot interfix and lot sequence number. (Example: XYZ74H004-006 shall be the LAP lot number for the assembled fuze.) The assembled fuze shall not retain the AAA97F007-001 lot number identification.

4.1.2 Year of production. Each ammunition lot number commencing with the first lot manufactured, assembled or modified shall have the year of production inserted after the manufacturer's identification symbol. The year of production is a two (2) digit code represented by the last two (2) numbers of the current year that manufacture, assembly or modification of the lot was initiated. There are no spaces between the manufacturer's identification symbol, the year of production code and the alpha code used to identify the month of production. The contractor is responsible for the correct application and placement of the year of production code into the lot number. However, ACO'S, QAR'S, PCO'S, PQM'S, Commodity Managers, Inspectors, QA Specialists, etc., are responsible for assuring that contractors are knowledgeable in the use and application of the year of production code and that the code used correctly represents the year of production for the lot.

4.1.3 Month of production. Each ammunition lot number commencing with the first lot produced, assembled or modified shall have the month of production inserted after the two (2) digit code identifying the year of production. The month of production is a single alpha code assigned as follows:

January	- A	May	- E	September	- J
February	- B	June	- F	October	- K
March	- c	July	- G	November	- L
April	- D	August	- H	December	- M

The single alpha code reflects the month of the year in which the manufacture, assembly or modification of the lot was initiated. There are no spaces between the year of production code, the month of production code and the first digit of the lot interfix number. A change in the month of production does not necessitate the lot interfix number or the lot sequence number to revert to

## MIL-STD-1168B

"001." The contractor is responsible for the correct application and placement of the month of production code into the lot number. However, ACO'S, QAR'S, PCO'S, PQM'S, Commodity Managers, Inspectors, QA Specialists, etc., are responsible for assuring that contractors are knowledgeable in the use and application of the month of production code and that the code used correctly represents the month of production for the lot.

4.1.4 Lot interfix number. Each ammunition lot number commencing with the first lot produced, assembled, or modified shall have an interfix number not to exceed three (3) digits (999). The interfix number will usually start with "001". Others will be based on the determination of those persons responsible for assigning interfix numbers as defined in paragraphs 4.1.4.2 and 4.1.4.3.

4.1.4.1 Assignment of lot interfix numbers. Assignment of lot interfix numbers or blocks of numbers will be made by those persons delegated with the responsibility of determining when the interfix number will be changed, when and what blocks of interfix numbers will be used, etc. When there is any uncertainty as to the last previous interfix number used for the item, the assignment will be coordinated with the master data card repository of the appropriate procuring service prior to authorizing production and assignment of an interfix number. (See 6.7 for listing of master data card repositories.) In most instances assignment of interfix numbers for an item will be in numerical sequence. (Exceptions to this procedure are cited herein.) Plant, depot, etc. personnel (Government and contractor) are responsible for alerting persons responsible for assigning interfix numbers when changes are anticipated.

4.1.4.2 Responsibility for assigning interfix numbers. Product Quality Specialists, as appropriate, will be responsible for assigning interfix numbers for those lots of ammunition components, ammunition items of issue, explosive materials, etc., manufactured or assembled by the various private contractors, GOGO and GOCO facilities. Delegation of this authority to plant QAR'S, ACO'S, etc., does not relieve these persons of primary responsibility. The Chief Inspectors/Quality Assurance Specialists of the Quality Assurance functions at depots, in the field, etc., will be responsible for assigning interfix numbers for those items and those lots which are modified or some other type of operation performed which will necessitate a change in the interfix number.

4.1.4.3 Responsibility for correctness and proper use of interfix numbers. Persons responsible for assigning interfix numbers (see 4.1.4.2) or those delegated the responsibility will be the primary persons responsible for the correctness and proper

## MIL-STD-1168B

use of interfix numbers. Once the same manufacturer has produced a lot of an item, the interfix number must never revert to "001" even though several years have elapsed since the producer last manufactured or assembled the item. Since the procuring services' master repositories retain files permanently, acquisition of the final interfix used in previous production is relatively easy to obtain. There is no reason for interfix numbers to be used more than once for the same item, hence no reason for duplicate lot numbers. All user personnel of data cards should notify the proper persons when interfix numbers or lot numbers are incorrect, improperly shown, etc.

4.1.4.4 Actions requiring changes in interfix numbers. Under certain conditions changes in contract shall require a change in interfix number. Changes in design, manufacturing processes, materiel, production methods, certain administrative procedures, suppliers, etc., shall manifest themselves into a change in the interfix number and all lots for that item produced under the altered conditions will have a different interfix number. Interfix numbers may be changed for reasons other than those noted herein when it is considered necessary by the Government. Each reason for changing interfix numbers shall be stated in the remarks block of the data cards. Persons generating the data cards are responsible for properly reporting and recording interfix changes and the reasons for the changes. The following occurrences necessitate changes in interfix numbers:

4.1.4.4.1 For administrative purposes.

4.1.4.4.1.1 Different interfix numbers. Lot interfix numbers must be different: for various items made or assembled by the same manufacturer at the same location, for the same item made or assembled by the same manufacturer at the same location at different times, for items which may be confused with one another, or for different items which are of the same caliber or size.

4.1.4.4.1.2 Concurrent manufacturing. If a contractor is concurrently manufacturing or loading several similar items at the same facility, then each item must have distinct interfix numbers. This will be accomplished by assigning "blocks of interfix numbers to each of the specific items considered as "items of a similar nature". "Blocks of interfix number" may be assigned to "010's", "020's" or whatever progressions the responsible assigning person considers feasible based on procurement, contractual and production projections. This may be accomplished as exemplified in the following:

## MIL-STD-1168B

A contractor (manufacturer's identification symbol "AMC") producing three (3) similar bomb tail fuzes (M800 series, M801 series, and M802 series) should have interfix numbers assigned in accordance with the following:

At the start of production, the M800 series would be assigned the "block of interfix numbers" from "001" to "009", the M801 items, block "010" through "019", and the M802 bomb tail fuzes, interfix numbers "020" through "029". The initial production lot number for the M800 would be AMC97H001-001. The "001" interfix series shall continue until an approved engineering change order or some other factor required a change from the "001" interfix. The next interfix number for the M800 production would be "002" and the initial lot produced reflecting the change would be AMC97L002001, then AMC97M002-002 and so on through AMC98J009-001, AMC98K009-002, AMC98L009-003, etc.

The first lot of M801 bomb tail fuzes shall be numbered AMC97H010-001, AMC97J010-002 and so on through AMC97K019-001, AMC97L019-002, AMC97M019-003, etc.

The first lot of the M802 series shall be numbered AMC97K020-001, AMC97K020-002, and so on through AMC98D029-001, AMC98D029-002, AMC98E029-003, etc.

The first group to exhaust its block of interfix numbers would proceed to the next logical progression.

Example: The M801 bomb tail fuze production reaches lot number AMC98E019-012. A change in interfix number is now required. This group would then be assigned a block of interfix numbers from "030" to "039". As a result, the next lot of M801 fuzes produced will have a lot number AMC98F030-001. However, nose fuzes and tail fuzes with distinct model numbers produced at the same facility may be assigned the same interfix number. Also, primers, detonators, bursters, fuzes, etc., produced at the same facility may be assigned the same interfix number as long as the basic model numbers are completely different in each case.

4.1.4.4.1.3 Development. When a development category (XM) model number is standardized, the next lot produced as the standardized model will simply be assigned the next higher sequential interfix number. The last sequence number will again revert to "001".

Example: Fuze, XM302 with lot number AMC97H002-004 converts to fuze, M302A1. The next production lot of the now standardized model shall be numbered AMC97J003-001.

## MIL-STD-1168B

4.1.4.4.1.4 Same size or caliber items. Whenever items of the same size or caliber are being manufactured or assembled by the same producer at the same facility, all such items will be assigned different blocks of interfix numbers. In these instances, blocks of interfix numbers will be assigned in the order that production or assembly of such items is accomplished, as noted herein and in accordance with the provisions of 4.1.4.4.1.2, 4.1.4.4.2.3, 4.1.4.4.2.4, 4.1.4.4.2.7, and 4.1.4.4.2.8.

Loading facilities or manufacturing plants producing items of like size or caliber with different model numbers shall not be allowed to use the same interfix number on any such items. In this way, potential duplication of lot numbers for those items of like size or caliber, shall be avoided. Additionally, it allows for simplified identification by field users and helps to avoid use of the wrong type of ammunition in certain given situations.

The following reflects the situations noted above:

4.1.4.4.1.4.1 Different type projectiles. Different type projectiles of the same caliber manufactured or assembled by the same producer will be assigned different blocks of interfix numbers. However, projectiles of different calibers may be assigned the same interfix number.

4.1.4.4.1.4.2 Different type cartridge cases. Different type cartridge cases of the same caliber manufactured by the same producer will be assigned different blocks of interfix numbers, but cartridge cases of different calibers may be assigned the same interfix number.

4.1.4.4.1.4.3 Different rounds of the same caliber. Different complete round items of the same caliber assembled at the same facility will be assigned different blocks of interfix numbers, whereas complete rounds of different calibers may be assigned the same interfix number.

4.1.4.4.1.4.4 Different type bombs. Different type bombs of the same size with identical manufacturer's identification symbols will be assigned different blocks of interfix numbers, but bombs of different sizes may be assigned the same interfix number. These procedures also apply to rocket motors.

4.1.4.4.1.4.5 Example. The following is an example of one of the foregoing situations:

A LAP facility is loading the 81 mm cartridge, M375. The lot currently being produced is numbered AMC97H011-006. At this point the same plant starts production on the 81mm cartridge, M374.

## MIL-STD-1168B

The M374 cartridge production must be assigned a block of interfix numbers, preferably "020" through "039". The first M374 cartridge lot number would be AMC97H020-001, etc. When the M375 cartridge production finished the, "019" interfix, interfix block "040" through "059" should then be assigned. These procedures are in accordance with 4.1.4.4.1.2.

4.1.4.4.1.5 Change in contract. Whenever a new contract is issued to the same producer for the same item, the materiel delivered under the new contract will have a new interfix number assigned, unless production under the new contract continues without interruption from the previous contract, all production from the previous contract has been completed, no significant technical data changes have been made, and no other events have occurred which normally necessitate changes in interfix numbers. Interfix number assignments for changes in contract will be issued in the normal sequence,) exceptions have already been noted. Lot sequence numbers will again begin with "001". At no time will the same manufacturer (private or Government) of the same item revert the interfix number back to "001" when production commences under a new contract, regardless of the number of years which may have elapsed since production or loading of the item was completed under the previous contract.

4.1.4.4.1.6 Sequence number exceeds "999". The next higher interfix number will be assigned in those rare instances where the lot sequence number for an ammunition item manufactured or assembled by the same contractor reaches "999" (exceeding three digits). The next lot produced will require that the sequence number again start with "001".

Example: The lot number for an item produced by a company with manufacturer's identification symbol "AMC" is AMC97A00-999. The next lot of this item produced will be numbered AMC97A007-001.

4.1.4.4.1.7 Change in manufacturer's identification symbol. Any conditions which warrant a change in the manufacturer's identification symbol will require a change in the pertinent interfix number. (See 4.1.1.5 and 4.1.1.6.) In these instances, the interfix number will revert to "001" (exceptions already noted) and the sequence number will again begin with "001".

#### 4.1.4.4.2 For technical reasons.

4.1.4.4.2.1 Interruptions. Whenever production or loading of an item is interrupted for a period of time in excess of thirty (30) days or for the period of time as determined by the responsible persons as defined in 4.1.4.2 and 4.1.4.3, a change in the pertinent interfix number is required. This applies even though no physical changes to the production facilities or

## MIL-STD-1168B

processes occurred during the shutdown. When production resumes, the next sequential interfix number will be assigned and the lot sequence number will again begin with "001".

4.1.4.4.2.2 Dismantling operations. When a contractor dismantles a production or loading line and then, at a later date, reassembles and commences production of the same item, such actions will necessitate a change in the interfix number to the next higher sequential number. The lot sequence number will again revert to "001."

4.1.4.4.2.3 Two distinct lines. Lots of the same item produced on two (2) distinct production lines using different tools will have different interfix numbers assigned based upon the order of their production or in accordance with the "block of interfix numbers" procedure outlined in 4.1.4.4.1.2.

4.1.4.4.2.4 Two distinct parts of a line. Lots of the same item produced on two (2) distinct parts of the same line will have different interfix numbers assigned in the order of their production or in accordance with the "block of interfix numbers" procedure outlined in 4.1.4.4.1.2.

4.1.4.4.2.5 Same item - different manufacturing methods. Lots of the same item, made by different methods of manufacture or to new designs, so altered from those previously used that a distinct change in function can be expected, will be assigned different interfix numbers to the next higher interfix number with the lot sequence, number reverting to "001."

Example 1: A change in designation from igniter, rocket motor, M23A1 to igniter M23A2 will require a change in interfix number to the next higher interfix number. If the final production lot of the M23A1 was AMC97H011-007, then the first lot of the M23A2 would be numbered AMC97J012-001. At no time will the interfix number start again with "001" or with any other number which will result in a duplication of interfix numbers for the entire igniter, rocket motor, M23 series, even though several years may have elapsed since the previous model designation was produced.

Example 2: The final production lot of the rocket, M72A1, 66mm was AMC97D016-012. Extensive changes are made. As a result, only the rocket motor, rocket launcher and igniter system remain the same. The changes however, are reflected by merely suffixing the model number to M72A2. The first production lot of the M72A2 must be AMC97L017-001. Again it is emphasized that items carrying the same basic model number and manufactured or loaded by the same facility will never be assigned the same interfix

## MIL-STD-1168B

number, resulting in duplication of lot numbers, no matter how numerous or how extensive the design, engineering, etc., changes might be.

The following exemplifies an instance when the basic model number changes. This necessitates starting the interfix number at "001" commencing with the first lot produced under the new basic model number.

The M52A2 fuze is last produced in 1953. After a 21 year lapse, production is again started. However, some changes are made, such as, effecting a timing delay through an arming slider mechanism. The fuze model number is changed to M52A2E3. Since the last lot number produced in 1953 for the M52A2 was MA-7-19. The first lot of the 1974 production of the M52A2E3 must be numbered MA-97B-008-001. If it is ultimately determined that the item should be given a completely different model number (XM717) in hope of losing the item's original identity with the M52 fuze series, then only at this point will the manufacturer revert back to a "001" interfix for the item.

4.1.4.4.2.6 Explosives and chemicals. For explosives and chemicals including black powder, blank powder, nitrocellulose, etc. the interfix number will be used to designate different types, grades or classes of the same materiel.

Example: Aluminum powder, type 1, grade 1, class 1 will be assigned interfix "001". For aluminum powder, type II grade 1, class 1 the interfix number will be "002." Any change in any designations of the basic item will necessitate a change in the interfix number.

4.1.4.4.2.7 Production line changes. Changes in production lines necessitate changes in interfix numbers. If a single production line is split into two or more parts, a different block(s) of interfix numbers will be assigned for those lots produced on the "new" production line(s). The lots being produced on the original production line will continue with the old interfix number and in the lot sequence number order previously used until such time as a change is effected which normally requires an interfix number change. All changes and further assignment of interfix numbers will be accomplished in accordance with the provisions of 4.1.4.4.1.2, 4.1.4.4.2.3 and 4.1.4.4.2.4.

4.1.4.4.2.8 Merging production lines. When two or more production lines are merged into a single line, the lots produced on the new single line will be assigned a different interfix number in sequence to the next highest number of those interfix

## MIL-STD-1168B

numbers used previously on the separate lines. The lot sequence number will again begin with "001."

Example: Two (2) lines are producing lots with lot numbers AMC97H00G-014 and AMC97H012-003. After the two (2) lines are merged the next lot produced on the new single production line will be numbered AMC97J013-001.

4.1.4.4.3 Best interest of the government. Changes in interfix numbers will also be accomplished when it is determined by those persons responsible for assignment of interfix numbers that it is necessary to change or the best interest of the Government will be served by changing interfix numbers.

4.1.4.5 Documenting changes in interfix numbers. Whenever changes in interfix numbers are effected all such changes shall be appropriately documented on the ammunition data card. Any and all reasons for interfix changes shall be clearly and precisely stated on the card for the last lot of the old interfix number and also on the card for the first lot of the new interfix number. In most instances, these comments shall be inserted in the "remarks" block of the ADC.

4.1.5 Lot sequence number. The 3 digit lot sequence number identifies a lot according to the sequence of production, within each lot interfix number. A sequence number shall be assigned to each lot produced regardless of the final disposition (see 4.2). The lot sequence number within each interfix shall always begin with "001" and continue in sequence until production of the item is terminated, a change is made in the item or its production which requires "999", or a change in contract is made. Whenever an alpha lot suffix is added to the lot, number, the alpha character becomes an integral part of the lot number. The terms "lot serial number,," "lot series number," and related have been replaced for use throughout this standard by the term "lot sequence number." Paragraph 3.33 more clearly places "serial" number in its proper perspective and use as related to identifying and numbering ammunition and other items, of production. The lot sequence number will begin with "001" following a successful first article. For example:

AMC97C001A001	First Article
AMC97C001A002	First Article - second submission
AMC97C001-001	First production lot

4.1.5.1 Responsibilities for assignment of lot sequence numbers. The supplier is directly responsible for the Assignment of sequence numbers and for making changes, as necessary. However, the conditions requiring changes in sequence numbers will be specified by the appropriate procuring agency,

## MIL-STD-1168B

National Inventory Control Point (NICP) or National Maintenance Point (NMP) for the applicable item. The appropriate Product Quality Manager, Quality Assurance Specialists (Ammo), Chief Inspectors, etc., are responsible that each producer is cognizant of the correct procedures, uses and applications of sequence numbers, is furnished proper guidance on a continuing basis, and is supplied with the necessary documents (standards, bulletins, manuals, etc.) to be used for reference purposes, direction, etc.

4.1.5.2 Responsibilities for correctness and proper use of lot sequence numbers. The contractor (either Government or private) manufacturing or assembling ammunition components, ammunition items of issue and explosive materials has the primary responsibility to assure that sequence numbers are correct and used properly at all times. However, ACO'S, QAR's, PCO's, PQM's, Commodity Managers,, Inspectors and other persons in related administrative positions are charged with the responsibility to make adequate checks necessary to assure that sequence numbers are being used correctly, changed properly, etc. These persons are the cognizant authorities for uses and applications of the sequence numbers. It is further the responsibility of all users of ammunition to note incorrect applications of lot numbers, errors in markings and on documents, and other related discrepancies, and to then notify the proper persons when such occurrences are observed.

4.1.5.3 Changes in lot sequence numbers. Actions requiring changes in lot sequence numbers to the next higher sequential number. In each of the following events, the lot interfix number shall remain unchanged:

4.1.5.3.1 For administrative purposes.

4.1.5.3.1.1 Time. When the contractually stipulated time frame for a lot has been attained. Frequently, the contract states that specific production time frames such as a shift, a day, a week, a month, etc., shall constitute a production lot, regardless of the quantity produced during the period. When such requirements have been met, a new lot sequence number, continuing in the sequence of the previous production, will be assigned.

4.1.5.3.1.2 Quantity. When the contractually stipulated quantity has been produced. In certain instances, a contract states that a particular number of units such as 5,000, 10,000, 20,000, etc., shall constitute a production lot regardless of the length of time required to produce such an amount. When such requirements have been met, a new lot sequence number, continuing in the order of the previous production, will be assigned.

## MIL-STD-1168B

4.1.5.3.1.3 Same producer - same item. When a new contract is issued to the same producer for the same item, the first lot manufactured under the new contract shall have a new lot sequence number assigned continuing in the sequence of production under the previous contract provided there has been no interruption in production, all production under the previous contract has been completed, no significant technical data changes have been made, or no other events have occurred which normally require a change in the interfix number. If a change has occurred which warrants a change in interfix, this will be accomplished in accordance with 4.1.4.4.1.5. There will be no instances when the same lot sequence number will be used following a change of contract number.

4.1.5.3.1.4 Change in manufacturer's identification symbol. Any condition which warrants a change in the manufacturer's identification symbol will result in a change in the lot sequence number (See 4.1.1.5, 4.1.1.6 and 4.1.4.4.1.7). In all such events, the lot sequence number shall always begin with "001."

4.1.5.3.2 For technical reasons.

4.1.5.3.2.1 Interruptions. When production or assembly of an item is interrupted and resumes again after a time lapse of not more than thirty (30) days, a new lot sequence number, continuing in the order of the previous production, shall simply be assigned provided no design changes were made in the interim or the method or production was not altered. Exceptions to this procedure are noted in 4.1.4.4.2.1.

4.1.5.3.2.2 Change in lot interfix number. All conditions which necessitate a change in the lot interfix number will also manifest themselves into a change in the lot sequence number (see 4.1.4.4 and all subparagraphs thereof). In each of these instances, the sequence number shall always revert to "001."

4.1.6 Ammunition lot suffix. (The alpha suffix.) The lot suffix, as defined herein and when required, becomes an integral part of the ammunition lot number and is applied directly after the sequence number as shown in 4.1. Lot suffixes will in all instances consist of one (1) alpha character and will be a capital letter. In identifying lots of ammunition or any quantities thereof which are being reworked, etc., the lot suffix will be assigned in alphabetical sequence starting with the letter "A" and continuing through "Z". (See 5.4 for listing of alpha characters whose use is restricted or prohibited.)

Over time, some lots of ammunition have the year of production shown as a part of the original lot number placed after the sequence number. Whenever such lots or quantities thereof are

## MIL-STD-1168B

reworked, the assigned lot suffix shall be the last entry in the lot number, exclusive of the year of production or any other symbols which may appear in the basic lot number upon application of the lot number as specified in 4.1.

Once a lot of ammunition or any portion thereof has been assigned an alpha ammunition lot number suffix, the suffixed lot assumes an independent status and a completely separate identity from that of the original basic lot or any quantities of the original lot which may be assigned a different suffix letter. Further pertinent data relevant to the authorization and detailed use of ammunition lot suffixes is contained in 5.1.3.

4.2 Mandatory numbering of ammunition lots. When drawings, specifications, and other documents or special direction so indicate, each lot of ammunition components, ammunition items of issue, explosives, etc., must have a lot number assigned at the time of manufacture or assembly, regardless of the ultimate disposition of the lot. This means that lots which have been rejected and then are scheduled for reworking, demilitarization, scrapping, etc., must have a basic lot number assigned. Only by so doing, shall proper controls be continually exercised.

4.3 Ammunition data cards.

4.3.1 Applicability. An Ammunition Data Card is required for each lot of ammunition materiel and serially numbered item of ammunition, as stated in the specification for that item. If the specification does not contain a requirement for data cards, or if the item is not covered by a specification, the necessity for data cards will be determined by the procuring activity. The procuring activity determination will be based on whether lot numbers are applicable or are likely to be applicable. When it is assured that the item lot numbers will be applicable, a data card requirement shall be included in the specification. Excluded from the requirements are all nuclear weapons including (but not limited to) projectiles, missiles and atomic demolition munitions.

4.3.1.1 Contractor preparation. When data cards are required, the contractor (manufacturer, loader assembler as appropriate) shall be responsible for their preparation.

4.3.1.2 Revised card. When all or part of an ammunition lot is reworked, renovated or modified, a revised ammunition data card shall be prepared. The revised data card shall include a description of the work performed which required the revision to the data card.

## MIL-STD-1168B

4.3.1.3 Accompany lot. Unless otherwise noted, a data card shall accompany each lot of ammunition materiel and each serially numbered item of ammunition to its destination whether when a Service, to another Service, or to another contractor or Security Assistance Program customer. This card shall be one prepared by the contractor or a duplicate card.

4.3.1.4 Sample card submission. When a manufacturer produces an item requiring an ammunition data card for the first time or after a one-year production lapse, one ADC, marked "sample", shall be submitted to AMSIO-QAA prior to start of production for approval of format and technical data.

All subsequent ammunition data cards produced by that manufacturer on that item will be in the approved format until changes are required by regulatory guidance, at which time a new sample card will be submitted to AMSIO-QAA for approval.

## 5. DETAILED REQUIREMENTS

### 5.1 Description and use of ammunition lot numbers under special conditions.

5.1.1 Non-standard and renovated lots. The following is a list of non-standard and, renovated lots with their corresponding lot identifier codes. This list only includes those lots that require special marking identification in the lot number for proper handling. The lot identifier code is a capital letter inserted in the ammunition lot number by replacing the hyphen with the appropriate alpha code or inserted into the propellant lot number by replacing the numeric character "0" immediately after the hyphen with the appropriate alpha code as specified in the following paragraphs.

## MIL-STD-1168B

<u>TYPES OF NON-STANDARD &amp; RENOVATED LOTS</u>	<u>LOT IDENTIFIER CODE</u>
Experimental Lots	E
First Article Lots	A
Functional Packed Lots	L
Hybrid Lots	H
Manufacturer's Production Control Lots	P
Master Calibration Component Lots and Master Calibration Lots	C
Reference Lots	R
Modified Lots	M
Overhauled Lots	V
Regrouped Lots (includes reblended propellant lots)	G
Special Lots - Proving Ground Tests, Special Requirements, Special Tests, Engineering Tests , etc.	S

5.1.1.1 Experimental lots. (The "E" lots.) These lots shall be identified by replacing the hyphen between the lot interfix number and the lot sequence number with a capital letter "E". The appropriate manufacturer's identification symbol will be applied and the lot sequence number shall identify in sequence the number of experimental lots developed by the particular manufacturer. The lot interfix number shall be identified by the numeric characters "000". At no time will the same manufacturer duplicate experimental lot numbers even though the type of materiel involved is different. Experimental lots will be numbered in accordance with the following:

1st Experimental Lot: PA-97K000E001  
 2nd Experimental Lot: PA-97K000E002  
 3rd Experimental Lot: PA-97L000E003  
 etc.

Experimental lots are produced in accordance with special instructions and are covered by engineering production orders. Experimental lots are those generally small quantities of ammunition items that are produced for:

- (1) Research and development.
- (2) Engineering design tests and special tests for engineering evaluations.

Special and engineering tests performed outside the place of manufacture, such as at the proving grounds, are normally covered by engineering test program requests - exclusive of engineering production orders. Ammunition designated as experimental lots will not be issued for field use nor flow into

## MIL-STD-1168B

the regular supply stream without special and specific authorization of the applicable NICP/NMP element.

5.1.1.2 First article lots. (The "A" lots.) These types of lots shall be identified by replacing the hyphen between the lot series number and the lot sequence number with a capital "A".

AMC97B001A001 (Indicates interfix 001-first submission)  
 AMC97C001A002 (Indicates interfix 001-second submission)  
 AMC97M002A001 (Indicates interfix 002-first submission)  
 etc.

Uses and applications of the manufacturer's identification symbol, the year of production code, the month of production code and the lot interfix procedures remain consistent with the pertinent provisions of this standard. The term "first article lots" is used herein and replaces previous use of such terms as, "pre-production lots", "pilot lots", "initial production", "prototypes", "first lots", etc.

NOTE: Upon successful completion of the first article the serial number of the production lot reverts to 1.

5.1.1.3 Functional packed lots. (The "L" lots.) These lots shall be identified by replacing the hyphen between the lot interfix number and the lot sequence number with a capital letter "L". The appropriate manufacturer's identification symbol shall be applied and the lot sequence number shall identify the order of production of a particular pack. At no time shall the same manufacturer duplicate functional lot numbers for items of a similar nature or for the same item in different combinations. Functional lots shall be numbered in accordance with the following,

Examples:

Cartridge, 20mm, 4-HE, M56A3, and 1-TP-T, M220  
 1st Functional lot - LC-97E001L001  
 2nd Functional lot - LC-97E001L002

Cartridge, 20mm, 7-HE, M56A3, and 1-TP-T, M220  
 1st Functional lot - LC-97E002L001  
 2nd functional lot - LC-97E002L002

Cartridge, 20mm, 1-HE, M210, 2-INC, M96 and 2-AP-T, M95  
 1st Functional lot - LC-97G002L001  
 2nd Functional lot - LC-97G002L002

## MIL-STD-1168B

Cartridge, 20mm, 4-TP, M55A2 and 1-HEIT-SD, M246

1st Functional lot - LC-97B003L001

2nd Functional lot - LC-97C003L002

Cartridge, 7.62mm, 4-Ball, M80 and 1-Tracer, M62

1st Functional lot - TW-97A001L001

2nd Functional lot - TW-97A001L002

Cartridge, 7.62mm, 9-Ball, . M80 and 1-Tracer, M276

1st Functional lot - FAA97A001L001

2nd Functional lot - FAA97B001L002

5.1.1.4 Hybrid lot (The "H" lots.) A hybrid lot of ammunition is an item of assembly or item of issue lot consisting of components of various interfix numbers or manufacturers in excess of the number permitted in the item of assembly or item of issue detailed specification. The primary purpose for the formation of hybrid lots is to reduce the waste of remnant accumulations of component items and lots through utilization in one or more conglomerate lots. Strict controls must be exercised to insure satisfactory and uniform performance of the item of issue. The procuring activity must authorize any formation of a hybrid lot before, not after, it is created. Hybrid lots must be formed from remnants of acceptable item-of-assembly lots which are considered to have an inherent quality of performance good enough to economically justify their formation and should only be authorized for those cases in which experience has demonstrated that the safety and functioning of the item will not be jeopardized to any undesirable extent. Once a hybrid lot is authorized and produced it shall be numbered in accordance with the provisions of this standard. A hybrid lot shall be identified by replacing the hyphen between the lot series number and the lot sequence number in the ammunition lot number with a capital letter "H". Other pertinent and identifying information will be placed in the "remarks" block of the Ammunition Data card. When formation of a hybrid lot is approved, it shall retain the same interfix number and simply be assigned the next higher lot sequence number than that of the last regular lot produced as shown in the following example:

Example: A manufacturer has produced 37 lots in the "004" interfix series of a particular item of assembly. The last lot number of this production is AMC97K004-037. The producer finds he has a large amount of components remaining which are from an assortment of manufacturers and metal parts lot numbers. The quality throughout the production of the "004" interfix series had been good. He requests permission to produce a "hybrid lot" with a quantity of approximately 8,000 units. Upon receiving

## MIL-STD-1168B

approval he produces a "hybrid lot" consisting of 8,127 units. The lot is numbered as follows:

AMC97L004H038

Occasionally more than one (1) hybrid lot would be formed within an interfix. In such instances, the lot sequence number would progress in the usual manner - AMC97M004H039, AMC98A004H040, etc. Year of production and month of production would progress as appropriate.

5.1.1.5 Manufacturer's production control lots. (The "P" lots.) These lots are usually used for the testing of items so that the manufacturer can judge the effectiveness of his production methods. Each manufacturer's production control lot submitted for a test shall be identified by a lot number. The manufacturer's identification symbol shall be the same as that used for normal production. The lot interfix number reflects the relationship of the material being tested and that in regular production. The lot sequence number shall bear no relationship to normal production lots, but shall be assigned in a numeric sequence, beginning with "001" to designate the test number. The capital letter "P" shall replace the hyphen between the lot interfix number and the lot sequence number in the ammunition lot number. For propellants the numeric character "0" directly after the hyphen shall be replaced with a capital letter "P" in the propellant lot number. This will identify the lot as a manufacturer's production control lot. The following are examples of the numbering of a manufacturer's production control lots when it is resolved to run tests during production of the "003" interfix:

Non-Propellant

Propellant

AMC97A003P001 (first test)

RXA97B-P00001 (first test)

AMC97A003P002 (second test)

RXA97B-P00002 (second test)

AMC97A003P003 (third test)

RXA97B-P00003 (third test)

The year and month codes shall identify the year and month of manufacture of the initial production of the manufacturer's production control lot for the item.

5.1.1.6 Master calibration component lots and master calibration lots. (The "C" lots.) Non-propellant component or end item lots approved as master calibration lots shall be identified by replacing the hyphen between the lot interfix number and the lot sequence number with a capital letter "C". Propellant lots approved as master calibration lots shall be identified by replacing the character immediately after the hyphen in the propellant lot number with a capital letter "C".

## MIL-STD-1168B

The new lot number shall be applied directly to the Ammunition Data Card and all appropriate controlling documents. Any detailed comments should be made in the "remarks" block of the Ammunition Data Card. As a minimum, the new lot number shall be marked on all external packages or cartons, and if necessary, applied directly to the individual units for identification purposes. Upon selection of a lot to be a calibration lot, the appropriate procuring activity is responsible to notify the manufacturer of the selection and to take actions needed to apply the appropriate identification to the individual units in the lot, the containers in which the lot is packed, the Ammunition Data Card (DD Form 1650) for the lot, and all other pertinent documents. Where only a portion of a lot is approved as a calibration lot, then only those units will be marked appropriately.

5.1.1.7 Reference lots. (The "R" lots.) These lots pertain to the reference standard component lots and reference standard items of issue lots for items above 30mm and reference lots for small arms ammunition. Non-propellant component or end item lots approved as reference lots shall be identified by replacing the hyphen between the lot interfix number and the lot sequence number with a capital letter "R". Propellant lots approved as reference lots shall be identified by replacing the character immediately after the hyphen in the propellant lot number with a capital letter "R". The appropriate manufacturer's identification symbol, year of production code and month of production code remain consistent with the pertinent provisions of this standard. For small arms reference lots, the lot sequence number shall be used to identify in sequence the number of reference lots produced by the manufacturer identified with the manufacturer's identification symbol. The interfix number will be the number "000". At no time shall the same manufacturer duplicate a reference lot even though the type of material involved is different. Lot numbering of reference lots is illustrated by the following:

a. For small arms.

1st reference lot:	LC-97L000R001
2nd reference lot:	LC-98B000R002
3rd reference lot:	LC-98D000R003

b. Other than small arms:

LC-97D031-009 was selected and approved to be a reference lot. The new lot number becomes LC-97D031R009.

## MIL-STD-1168B

The new lot number shall be applied directly to the Ammunition Data Card and all appropriate controlling documents. Any detailed comments should be made in the "remarks" block of the Ammunition Data Card. As a minimum, the new lot number shall be marked on all external packages or cartons, and if necessary, applied directly to the individual units for identification purposes (see 6.1).

5.1.1.8 Special lots. (The "S" lots.) The "S" eliminates use of interfix designations "PG", "SR", "ST", "SP", etc. Certain lots of ammunition are manufactured for specially expressed purposes, such as proving ground tests, special requirements, special tests, engineering tests, etc. Generally they are not intended for use as service or training ammunition. Presently, these lots are identified by various alpha symbols used as an interfix. These "S" lots shall be numbered consecutively regardless of type and size of the item and no matter how small the quantity. Lots shall simply be numbered ABC97F001S001, ABC97F001S002,, etc. When ABC98D001S999 is reached the producing facility shall continue numbering by merely changing the interfix to 002. The next "special lot" of these types would then be ABC98E002S001,etc. The following exemplifies this type of lot numbering:

A quantity of grenade bodies is diverted from an assembly line and is loaded with an inert filler in lieu of an explosive bursting charge. A standard line fuze is then assembled to the inert loaded grenade bodies. This special lot is being assembled for use in special tests. Lot number ABC97K001S001 will be assigned. At the same plant a special lot of a completely different item is prepared. This lot number will be ABC97L001S002. (No national stock number will be assigned/used for these special lots. The sole identification for these lots will be the complete nomenclature and the lot number.) The authority for creation of the special lot, how it is to be used, where to be used, the test project designation and all other information pertinent thereto shall be cited in the "remarks" block of the Ammunition Data Card. The "S" lots will not be issued for field use nor flow into the regular supply stream without special and specific authorization of the applicable NICP/NMP element.

5.1.1.9 Regrouped lots. (The "G" lots.) The "G" lots shall be identified by replacing the hyphen between the lot interfix number and the lot sequence number with a capital letter "G". Lot numbers shall be assigned in the normal manner with the interfix numbering beginning at "001" and advance numerically in accordance with the provisions contained herein for assigning lot interfix numbers (see 4.1.4 and all paragraphs thereto). These

## MIL-STD-1168B

lots occur only when regrouping action of lots is performed or the rework of the basic lot is of such proportions as to clearly destroy the principles of lotting concepts. The regrouping action may or may not include modification, conversion, overhaul, reblending, or extensive maintenance. Work may be performed at LAP facilities, depots, bases, etc. New lots shall be formed in accordance with the requirements of the regrouping directive. The manufacturer's identification symbol shall be that of the activity performing the renovation/regrouping. The year and month codes will be identified by the year and month in which regrouping was initiated. The following exemplifies the numbering of regrouped lots by a given depot for any item on which regrouping operations are performed:

AMA75A00IG001, AMA75A001G002, etc.  
 AMA75C002G001, AMA75C002G002, etc.  
 AMA75E003G001, AMA75E003G002, etc.  
 AMA75G004G001, AMA75G004G002, etc.

Assignment, changes, etc. of lot interfix numbers and lot sequence numbers for the "G" lots, shall be accomplished in the same manner as normal production lots as outlined in 4.1.4 and 4.1.5 and all subparagraphs thereto. In all such actions detailed comments must be inserted in the remarks portion of the data card including a listing of the former lot(s) being renovated, modified, regrouped, etc. Proper use and application of the "G" lots is the responsibility of the PQS, PCO, Chief Inspector or the NICP/NMP Product Assurance Commodity Manager, as appropriate, in accordance with the conditions under which the work is performed.

5.1.1.10 Modified lots. (The "M" lots.) These lots shall be identified by replacing the hyphen between the lot interfix number and the lot sequence number with a capital letter "M". The lot number shall be assigned in the normal manner with the manufacturer's identification symbol being that of the facility performing the modification, and interfix numbering beginning at "001" and advancing numerically in accordance with the provisions contained herein for assigning lot interfix numbers (see 4.1.4 and all paragraphs thereto). Modification may or may not be performed when regrouping of lots is being accomplished.

5.1.1.11 Overhauled lots. (The "V" lots.) These lots shall be identified by replacing the hyphen between the lot interfix number and the lot sequence number with a capital letter "V". Overhauled lots are "regular production" lots which have had required exterior maintenance performed on them (see 3.23). No change is made in the basic lot number except as described above.

## MIL-STD-1168B

5.1.2 Partial lot. As noted in 3.25, a partial lot is primarily defined as a sub-division of a normal ammunition lot. Partial lots are usually permitted for use to expedite shipments and deliveries of critically needed items, as a convenience in controlling production quantities of a shift, day, week, etc., to facilitate ease of shipments, e.g., an exact amount for loading in a railroad car or semi-trailer, or to allow for split shipments to two (2) or more plants, depots, etc. Their intended purposes and usage are temporary. Identification should only be shown on the appropriate controlling documents which, if desired, can be destroyed after the "partial" has served its intended purposes. Partial lots shall simply be identified with the basic lot in a numerical sequence based on the order of production. This information will be placed in the remarks block of the ammunition data card and shall not be a part of the lot number per se. Authorization to manufacture, assemble and move partial lots of ammunition is a function of the applicable procuring activity.

5.1.3 Ammunition lot suffix. (The alpha suffix.) The basic principles, formation and limitations of the ammunition lot suffix are discussed in 4.1.6 and 5.4. The following describes the specific, detailed uses, applications and restrictions of the ammunition lot suffix:

5.1.3.1 Rejected lots. When a lot of material is rejected at the point of original manufacture or assembly and it is determined that the lot can be made usable by reworking the material, the new lot shall be identified by the addition of a capital letter "A" after the lot sequence number. In the event that the "A" suffixed lot is reworked at the production plant, the lot suffix "A" would be replaced by a capital letter "B". If the suffix is applied at the production facility, the suffix applied to the lot number and the rework performed on the lot will be reported to the procuring activity. A note shall be placed in the remarks stating what rework was performed and that the parent lot (the lot without the suffix) does not exist. When only a quantity of the lot is being reworked, the first change or rework performed shall be identified by affixing a capital letter suffix "A", the next change or rework of the same basic lot or quantity thereof for the same item shall be identified by the addition of a "B" suffix, etc. A note shall be placed in the remarks stating what rework was done and the parent lot of the quantity. Use paragraph 5.1.3.2 as a guide to suffixing quantities less than the entire lot.

Examples: Lot AMC97J006-002 original production lot, is rejected. After reworking, the lot number becomes AMC97J006-002A. The reworked lot AMC97j006-002A is rejected and reworked. The new lot number then will be AMC97J006-002B, etc. Lot

## MIL-STD-1168B

suffixes will be assigned in alphabetical sequence as defined in 4.1.6 with exceptions as noted in 5.4. Lot suffixes for new production lots will be authorized by the appropriate QAR, ACO, PCO or PQM.

5.1.3.2 Reworking. When a lot of ammunition or a quantity thereof has been designated for reworking at a facility other than the original plant (i.e., depot, station, field, ship, base, etc.), then the facility performing the rework shall request a suffix assignment for the specific quantity of the item and lot number for which the rework is to be performed from the appropriate procuring activity designated element (see 5.1.3.4). The request must also stipulate the changes being made during the rework process. The first change or rework performed on a lot of ammunition or a quantity thereof shall be identified by affixing a capital letter suffix "A", the next change or rework of the same basic lot or quantity thereof for the same item shall be identified by the addition of a "B" suffix, etc., as exemplified in the following:

a. The original quantity of AMC97J002-012 is 10,000 rounds. Three (3) years later 2,000 rounds at depot I are defuzed and plugged. This 2,000 quantity now becomes AMC97J002-012A.

b. Depot II has 3,000 rounds of the same basic lot. Four (4) years later it is found that 1,500 of these rounds need replacement primers. The 1,500 are then identified as AMC97J002-012B. The 1,500 rounds with the original primer remain as AMC97J002-012.

c. Four and one-half (4 1/2) years after production, depot III determines to defuze and plug the 800 rounds of the same basic item and lot which they have in storage. This 800 quantity would now be identified as AMC97J002-012C.

d. Five (5) years later depot I decides to unplug and refuze 1,000 rounds of the original 2,000 rounds which were defuzed and plugged. This 1,000 rounds now becomes AMC97J002-012D.

Different suffixes must be assigned for different types of reworks which are performed on the same basic item. Different suffixes must also be assigned even when the same type of rework is performed at a different time or different place as exemplified in a and c above. For instance, X-raying of separate quantities of the same basic item at different times, even if performed at the same depot, would necessitate the assignment of different suffixes to identify each Of the quantities X-rayed.

## MIL-STD-1168B

5.1.3.2.1 Reworking in the field. When lots are assigned a suffix during production (see 5.1.3.1) and later require reworking in the field, the next sequential alpha will be used to identify the quantity being reworked in accordance with exceptions noted in 5.4.

5.1.3.2.2 Reworking at depots. When lots or portions of lots of ammunition are being reworked at depots, in the field, etc., the authorization for issuing rework instructions and the types of operations to be performed, quantities, etc., is the responsibility of the appropriate NICP/NMP agency.

5.1.3.3 Lot suffixes during rework. More extensive use is to be made of lot suffixes in identifying reworks etc., performed on a lot of ammunition under the conditions described in 4.1.6, 5.1.3.1, and 5.1.3.2. The identity of the "parent" lot must be retained so long as it is considered practical or economically feasible. This can be accomplished as long as the changes effected, when reworking, are properly recorded in the "remarks" portion of the revised data card. Also, definitive information relative to the planned rework procedure must be submitted when the lot suffix is requested. Broadening the scope, application and use of the lot suffix to identify changes, modifications, renovations, etc., to the "parent" lot provides a more efficient method to control the basic lots in events of malfunctions, suspensions and releases.

5.1.3.4 Facility request for a suffix. Once a rework procedure has been issued for a lot of ammunition or a quantity thereof to a facility other than a new production plant, the facility performing the rework shall request a suffix in accordance with the following:

- a. For the Air Force - Commander, Ogden Air Material Area, ATTN: OOAMA (MMSS), Hill Air Force Base, UT 84406.
- b. For the Navy - Commander, Code 4021, NAVSURFWARCENDIV, 300 Highway 361, Crane, IN 47522-5001.
- c. For the Army - Commander, US Army Armament Command, ATTN: AMSIO-QAO, Rock Island, IL 61201, with the exception of guided missiles and large rockets as noted in 5.1.3.4.d below.
- d. For guided missiles and large rockets as appropriate - Commander, US Army Missile Command, ATTN: AMSMI-NL/NE (NMP), Redstone Arsenal, Huntsville, AL 35809.

5.2 Propellant lot numbers. The lot numbering system for standard ammunition as defined in paragraph 4.1 will not be

## MIL-STD-1168B

followed for assigning lot numbers to bulk propellants. The following illustrates the construction of a propellant lot number.

```

ABC97A-056342A
| | | | | |
a b c d e f

```

- (a) Manufacturer's identification symbol.
- (b) A two (2) digit numeric code identifying the year of production.
- (c) A single alpha code signifying the month of production.
- (d) A one (1) digit code signifying regular production propellant lots or nonstandard propellant lots as specified in the following paragraphs and 5.1.
- (e) A five (5) digit number representing the serial number.
- (f) Ammunition suffix (the alpha suffix).

The appropriate manufacturer's identification symbol (see 3.20) and the correct month and year of production (see 3.22 and 3.34) must be applied. Propellant lot serial numbers (see 3.33) shall range from "00001" to "99999" and will be obtained from the contracting officer.

Propellant lot numbers shall not exceed fourteen characters in length and no characters shall be separated by spaces. The minimum number of characters used shall be thirteen (13). This occurs only if no ammunition lot suffix is added.

Regular production lots shall be identified by retaining the numeric character "0" immediately after the hyphen in the propellant lot number, while those lots not of regular production, included in the non-standard lots (see 5.1), shall be identified by replacing that numeric character "0" with the appropriate lot identifier code.

Propelling charges for both fixed and semi-fixed ammunition will carry the same lot number as that of the bulk propellant in their manufacture. Separate loading propelling charges using more than one propellant will be assigned one (1) lot number and that shall be a standard ammunition lot number.

5.2.1 Reprocessed propellant lots. Elimination of the interfix designation "R". Propellant lots that are reprocessed without losing their physical identity will be considered as

## MIL-STD-1168B

having undergone a rework operation. The ammunition lot suffix will be used for these lots. The propellant lot number will remain the same except for the addition of the alpha suffix. No change is required for the year and month in which the reprocessing was accomplished as illustrated below:

RAD97K-067210 is reprocessed. The new lot number becomes RAD97K-067210A.

5.2.2 Reblended propellant lots. Elimination of the interfix designation "B". Propellant lots that are reblended will be classified with the regrouped lots (see 5.1.1.9). Reblended lots will be identified by replacing the number "0" directly after the hyphen with a capital letter "G". The year and month codes will be identified by the year and month in which blending of the propellant lot was initiated. A blending of one or more propellant lots acquires new chemical characteristics and will require a new serial number to be assigned. The manufacturer's identification symbol shall be that of the activity performing the reblending operation. The following examples illustrate the identification of reblended propellant lots:

RAD97H-068728 is reblended in October of 1988. The new lot number becomes RAD98K-G68728.

RAD97B-067777 and RAD97K-067792 are blended together in September of 1998. The new lot number becomes RAD98K-G68002.

5.2.3 Reblended and reprocessed propellant lots. Elimination of the interfix designation "RB". Propellant lots that are both simultaneously blended and reprocessed will be classified in the category of a reblended propellant lot and shall follow the corresponding identification procedures (see 5.2.2).

5.3 Marking of lot numbers on explosive components, inert components, complete rounds, and guided missiles. (This section is not to be used as instructions to the service draftsman for the preparation of marking drawings.)

5.3.1 Marking drawings (for contractors preparing drawing). Drawings shall be prepared for each item showing all required markings. These drawings shall locate, describe, and specify method(s) and materiel(s) for all markings and shall be known as "marking drawings". All "marking drawings" shall be forwarded to the procuring activity for review and approval before commencing the manufacture of the ammunition or explosive materiel involved. Marking shall be accomplished in accordance with the appropriate "marking drawing."

## MIL-STD-1168B

5.3.2 Explosive loaded components. (See 5.3) Each explosive loaded component shall be identified by a loader's lot number which shall appear on the item itself whenever size permits. The location, method of marking, and size of the lot number shall be shown on the applicable "marking drawing". The marking shall be permanent in nature and may consist of a stamping in the materiel of the item; a permanently attached non-destructible plate; or stenciling with a marking fluid of materiel that is highly resistant to weather and wear. The method of marking shall be an engineering determination (see 6.1). The location of the marking shall be an engineering determination also, due to such considerations as kind of materiel to be marked, size and shape of item, etc. The size of the marking shall be such that identification of the lot number, may be readily determined. Examples of such components are fuzes, igniters, warheads and rocket motors. Loaded components are defined as those components containing explosive materiel and the lot numbers are known as component numbers.

5.3.3 Inert components. Inert components, subassemblies, and parts, whenever the size permits, shall be marked with their respective lot numbers similarly to loaded components. When size does not permit marking on the individual item the lot number shall be recorded/marked I on the appropriate packing-containers.

5.3.4 Complete assembled rounds. Complete assembled rounds, small caliber cartridge (below 20mm) and guided missiles excepted, shall be identified by lot numbers on the item itself. (See 6.1 for other type exceptions.) The location, method of marking, size, and color of the lot number shall be as shown on the applicable "marking drawing. Marking shall be done by the stenciling method using a stencil ink, fluid, or other material that is highly resistant to weathering and wear. The markings shall be prominently displayed on the body of the items in such a manner as to be easily read. Marking shall be accomplished in the color specified for the type of ammunition or explosive materiel concerned.

5.3.5 Guided missiles. (See 5.3) Guided missiles as complete items of ammunition shall be lotted. Guided missiles do, however, contain explosive loaded components. These components shall be lotted and properly identified by the loader's component lot number. If specifically required by the procuring activity, the complete nomenclature and lot number of each explosive component shall be stenciled on the body of the guided missile. The size of the markings shall be consistent with the size of the missile. Marking shall be accomplished by stenciling. Details of marking shall be shown on applicable

## MIL-STD-1168B

"marking drawings." Complete round guided missiles renovated or modified by either replacing or modifying the original explosive components require that a suffix be added either to the serial number or lot number. A suffix may also be used to control non-explosive changes that are directed by the responsible organization. Instructions for each application are furnished in the respective Technical instructions. When a suffix is required but not furnished in the above instructions it will be requested from the responsible activity.

5.4 Exceptions to use of certain letters as ammunition lot suffixes. (See 4.1.6 and 5.1.3) When reworking any items of ammunition at an LAP facility, depot, etc., where the application of an ammunition lot suffix is required, the following letters shall not be used as suffixes except as noted herein:

- a. "E" - no exceptions other than as used to denote experimental lots. (See 5.1.1.1)
- b. "I" - no exceptions. Can easily be confused with the number "1".
- c. "O" - no exceptions. Could be easily mistaken for the number "0" (zero).
- d. "X" - no exceptions. (See 6.2)

5.5 Required use of complete lot number. In reference to individual lots, whether in correspondence, in records, or in marking containers, packages, cartons, etc., the complete lot number shall be used.

5.6 Elimination of the "500 series". The "500 series" interfixes were previously used to identify lots which were regrouped. Implementation of the provisions of 5.1.1.9 (The "G" lots) in their entirety eliminates any need for a "500 series", since differentiation of whether modifications are performed while regrouping becomes irrelevant.

5.7 Elimination of the use of "PG", "SP", "SR", "ST", etc., in lot numbers. With the introduction, adoption, and implementation of the provisions of 5.1.1.8 special lots -- the "S" lots, the need or use of interfix designators such as "PG", "SP", "ST", "SRI", etc., no longer exists. Therefore the use of such interfix designators is no longer authorized or will no longer be permitted and the provisions of 5.1.1.8 adhered to.

5.8 Elimination of the use of "B", "R", and "RB" in propellant lot numbers. Implementation of the provisions of 5.2.1, 5.2.2 and 5.2.3 in their entirety eliminates the need for

## MIL-STD-1168B

the use of "BI, I "R", and "RB" for identifying reblended and reprocessed propellant lots.

5.9 Documenting information pertinent to lots produced under special conditions. Actions and reasons pertinent to forming, numbering, and identifying any and all ammunition lots produced under special conditions shall be explained in detail in the remarks block of the ammunition data card. These remarks shall include a listing of the lot(s) being reworked, modified, regrouped, etc.

5.10 Ammunition Data Card Specification and Format. Ammunition data cards shall be prepared using the government-furnished Ammunition Data Card program. The program creates a floppy diskette of data cards and can create hard copy printouts of data cards. All submissions, except for the monthly submission of the data diskette, shall be hard copy printouts of the data cards as prepared using the government-furnished program.

5.10.1 Data card format for inert items. The format of the data card for inert items shall be basically the same format as that for loaded items, with N/A in the blocks that are unnecessary.

5.10.2 Revised data cards. When data cards are revised as a result of renovation or rework, current information will be entered in all blocks where it differs from the original data card.

5.10.3 Ammunition data card program. The Ammunition Data Card program shall be provided by the procuring activity.

5.10.4 Preparation instructions. Preparation instructions, including those associated with the government-furnished Ammunition Data Card program, shall be provided by the procuring activity (see 6.6).

5.11 Distribution of data cards. The distribution of data cards shall be made in accordance with the instructions furnished by the procuring installation.

5.12 Cards enclosed with shipping document. Unless otherwise noted, a data card shall accompany each shipment of a lot or each serial-numbered item of ammunition to its destination whether within a service, to another service, to another contractor, or a Security Assistance Program customer. Where large quantities of the same lot are involved consisting of more

## MIL-STD-1168B

than one shipping package a single data card may be utilized and attached to the shipping documentation.

5.13 Distribution of data diskette. A copy of the data disk containing all the records prepared during the month shall be furnished to the procuring activity.

5.14 Provisional card to the proving ground. For lots requiring function test, the contractor must prepare a provisional data card for limited distribution pending determination of the final disposition of the lot. A provisional data card is identical in all respects to a final data card, except that the disposition block is marked "PENDING TEST". Two copies of the provisional data card must be forwarded to the proving ground with the ballistic test samples. Upon learning the final disposition of the lot and after any required waiver actions have been completed, the disposition shall be changed to reflect the ballistic determination.

5.15 Rejected lots. When a lot is rejected, the data cards for the lot shall be immediately distributed to the procuring activity. The government inspector, the contractor and proving ground. (If a rejected lot is later waived, the full distribution required shall be made and it shall be indicated that the lot shall be accepted.)

## 6. NOTES

6.1 Items. Items (squibs, small arms cartridges, etc.) too small to be identified by lot number or serial number on the item proper may be identified by tag or like methods if considered necessary or desirable. As the minimum, the lot number shall be recorded/marked on the packaging materiel down to and including the smallest intermediate pack. Determinations of these types are functions and responsibilities of the appropriate engineering agency. (See 5.3 and pertinent sub-paragraphs thereto.)

6.2 Historical information. At one time steel cartridge cases were assembled to complete rounds and were identified by the addition of a suffix "X" to the lot sequence number of the complete round lot number. Example: AMC-1-1X. This practice is no longer required and will not be used in future production. However, as noted in 5.4.(d) the letter "X" is not to be used as a lot suffix.

6.3 "Ammunition Manufacturers and Their Symbols", MIL-STD-1461. Initial copies, revisions, and supplements to MIL-STD-1461 titled "Ammunition Manufacturers and Their Symbols" may be obtained by writing or calling the Commander, United

## MIL-STD-1168B

States Army Industrial Operations Command (USAIOC) Product Assurance Directorate, AMSIO-QAA, Rock Island, IL 61299.

6.4 Method for obtaining required technical data. Copies of specifications, standards, drawings and publications required by contractors in connection with applicable procurement and production functions should be obtained from the appropriate procuring service NICP/NMP or as directed by the pertinent contracting officer, commodity manager, administering officer, QAR or PQM.

6.5 Procedure for requesting lot suffixes. Requests for suffixes should be directed to the appropriate procuring service NICP/NMP as outlined in 5.1.3.4. These are the only agencies authorized to issue lot suffixes for use out side of new production plants. All suffix requests should be documented e.g., letter, teletype, etc.

6.6 Associated Data Item Descriptions (DIDs). This standard is cited in DoD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL), as the source document for the following DIDs. When it is necessary to obtain the data, the applicable DIDs must be listed on the Contract Data Requirements List (DD Form 1423), except where the DoD Federal Acquisition Regulation Supplement exempts the requirement for a DD Form 1423.

<u>DID Number</u>	<u>DID Title</u>
DI-MISC-80043A	Ammunition Data Card (ADC)

The above DIDs were current as of the date of this standard. The current issue of the AMSDL must be researched to ensure that only current and approved DIDs are cited on the DD Form 1423.

6.7 Method for acquiring ammunition data cards. Each service shall maintain its own repository for ammunition data cards as follows:

a. For the Navy - Commander, Code 4021, NAVSURFWARCENDIV, 300 Highway 361, Crane, IN 47522-5001.

b. For the Air Force - Commander, Ogden Air Materiel Area, ATTN: OOAMA (MMSS), Hill AFB, VT 84406.

c. For the Army - Commander, Industrial Operations Command, ATTN: AMSIO-QAO, Rock Island, IL 62199-6000.

All requests for copies of ammunition data cards must be directed to the appropriate agency.

MIL-STD-1168B

6.8 Subject term (key word) listing.

Lot interfix number  
Lot sequence number  
Marking  
Propellant lot numbers  
Rejected lots

6.9 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:

Army - AR  
Navy - OS  
Air Force-99

Preparing activity:

Army-AR  
(Project 1395-0284)

Review activities:

Army - MI  
Air Force - 70  
Marine Corps - MC

## STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

### INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

**NOTE:** This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced documents(s) or to amend contractual requirements.

<b>I RECOMMEND A CHANGE:</b>	1. DOCUMENT NUMBER MIL-STD-1168B	2. DOCUMENT DATE (YYMMDD) 980610
3. DOCUMENT TITLE Ammunition Lot Numbering and Ammunition Data Cards		
4. NATURE OF CHANGE ( <i>Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.</i> )		
5. REASON FOR RECOMMENDATION		
6. SUBMITTER		
a. NAME ( <i>Last, First, Middle Initial</i> )	b. ORGANIZATION	
c. ADDRESS ( <i>Include Zip Code</i> )	d. TELEPHONE ( <i>Include Area Code</i> ) (1) Commercial (2) AUTOVON ( <i>if applicable</i> )	7. DATE SUBMITTED (YYMMDD)
8. PREPARING ACTIVITY		
a. NAME  U. S. Army TACOM-ARDEC	b. TELEPHONE ( <i>Include Area Code</i> ) (1) Commercial (973) 724-6671	(2) AUTOVON 880-6671
c. ADDRESS ( <i>Include Zip Code</i> )  ATTN: AMSTA-AR-EDE-S, B-12 Picatinny Arsenal, NJ 07806-5000	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Quality and Standardization Office 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466 Telephone (703) 756-2340      AUTOVON 289-2340	