

APPENDIX E
AMMUNITION LOT NUMBER GUIDE

E-1. AMMUNITION LOT NUMBER (ALN). A lot number is a statistical measurement used in the production process, both new production or renovation/maintenance, that readily identifies a homogenous grouping of assets for future reference.

The main intent of lot number formats is to identify three key information points: who made it, when it was made and a unique reference to the homogenous production run. Lot number formats for ordnance items, when specified by contractual requirements, conform to a format controlled by military standards. Table C-4.1 lists instructions/standards detailing ALN formats used since the 1940's.

<u>Instruction</u>	<u>Date</u>	<u>Description</u>
MILSTD-1168B	10 Jun 1998	Current direction on ALN format
MILSTD-1168A	28 Feb 1975	First to provide set character format
MILSTD-1168	20 Jun 1965	First MILSTD regarding ALN format
MIL-L-9835	27 Sep 1957	Ammunition Lot Numbering
OP-5 GUN AMMO	29 May 1958	Gun Ammunition lot system
OP-5 RKT/PROJ		Rocket and Projector charges
OP-5 PYROLOTS		Pyrotechnic Ammo lot system
MIL-HDBK-1461A	7 Apr 1999	Manufacturers' Symbols
MIL-STD-1461E	5 Nov 1990	Manufacturers' Symbols (Superceded)

Table C-4.1

E-2 Lot Numbering Systems. As the original military agencies for design, development, and production of ammunition, the Navy and Army developed lot numbering systems to accommodate their own procedures for control of the various ammunition commodities. In the interest of interservice support in ammunition supply and management, particularly in the exchange of reclassification actions because of malfunctions of common items, lot numbering was standardized by MIL-STD-1168. A quick reference for the various formats, both ammunition and bulk propellant, are provided as illustrations [C-4.1 thru C-4.3](#) AND [C-4-5 thru C-4.6](#). Even though the MILSTDs have been used since the mid 1960s, some assets in the current inventory do not conform to this standard. While most conform to one of the Table C-4.1 designated formats, there are several item unique formats that have no corresponding instruction.

The contractor or the program manager for those assets determined these formats. The In-Service Engineering Agent or Cognizant Field Activity/Assistant Program Manager for Logistics should be contacted to properly interpret these unique formats.

a. Items with lot numbers dating back to 1944 are still in stock and acceptable for use after minor maintenance. Expenditures of ordnance from 1944 to date have reduced many older lots to remnant quantities. By 1978 all Naval activities engaged in ordnance procurement or production complied with MIL-STD-1168A. Phaseout of the old style lot numbers by attrition and conversion during major maintenance is a long-term process. Management and control of ordnance will require backup data and an understanding of both systems.

b. U. S. Navy Old Style Lots (OP-5 Format). The majority of the older Navy gun ammunition ALNs adhere to the OP-5 directed formats.

(1) For gun ammunition, fixed rounds, separated rounds (projectiles and propelling charges), and separate loading rounds (projectiles, bag propellant sections, and primers) the lot structure is as follows:

BE-244-C-68

(a) Prefix. A two-letter prefix is used for new ammunition. In the example, the letters BE are permanently assigned to a caliber and type of gun ammunition item of issue, in this case a 5"/38 Projectile AAC with a mechanical time fuze (MTF) MK 50 or MK 349 installed. The use of a prefix as a part of gun ammunition lot numbers was considered necessary as a double check for nomenclature and DODIC/NALC (as in a message garble) and because gun ammunition items of issue were not assigned complete round Mark and Mod designations prior to 1978. The prefix is expanded to three letters by the addition of an "R" to signify a renovated lot (e.g., BER-1-H-74).

(b) Lot Sequence Number. A number from 1 to 999 assigned in sequence for each lot produced. The numbers begin with 1 for the first lot produced in the year production begins. Lots started on or after 1 January of the next year revert back to lot 1.

(c) Manufacturer's Identification. A one, two or three letter identification of the activity manufacturing or renovating the item. In the example, C is Crane AAA.

(d) Calendar Year of Production/ Renovation. A two-digit number to identify the year in which production or renovation of the ammunition lot was started.

(2) Pyrotechnics, Demolition Items, and Fuzes (OP-5 Format). USN designed and produced pyrotechnics, demolition items, and gun ammunition fuzes generally are identified by a MK and MOD permitting the elimination of the prefix. These lot numbers are structured as follows:

(a) Lot Sequence Number. A number beginning with 1 when production starts. In some cases (in-house production) the first lot started after the new year reverts back to lot 1. In other cases (commercial manufacture), the sequence number continues for the length of the contract and add-on procurements. Numbering continued provided there was no break in production.

(b) Manufacturer's Identification. The same as for gun ammunition.

(c) Calendar Year of Production. A two-digit number identifying year of production or a four-digit number, with or without a slash, identifying the month and year of production.

(d) U. S. Army Old Style Lots (MIL-L-9835 Format).

(1) The Navy uses a number of common items designed and procured by the Army. These are small arms ammunition items up to and including .50 caliber cartridges, grenades, antitank rockets, rockets, pyrotechnics, and demolition and mortar ammunition items. Army management of ammunition initially required only the control of the manufacturer's identification and sequential numbering of lots produced. Relative age as identified in Navy lots was maintained on master records in headquarters and available on ammunition data cards in the field. These early old style lots were structured containing these two elements, for example:

WCC-10950

(2) As production quantities increased with multiple production lines and follow-on reorders, an interfix number was added to ammunition lot numbers to group a series of lots into homogeneous lot strata. Interfix and sequence numbers are separated by a dash as follows:

COP-4-65

(3) The combination of two or more lots of complete rounds to form one lot, such as in linking complete rounds of .50 caliber cartridges, was handled by inserting a L after the manufacturer's identification as follows:

RA-L-30-57 or LC-L-1-47

d. General Policies and Procedures for Navy and Army Old Style Lot Numbering Systems.

(1) Manufacturer's (including in-house production and renovation activities) identification symbols as listed in MIL-STD-1461 were used.

(2)The Navy and Army used a system of suffixing lot numbers. One or two letters were added after the last digit in the lot.

(a) U. S. Army - The suffix indicated that a major or minor maintenance action had been performed on the parent lot. When the assignment of the suffix D is directed by higher authority, for example, the maintenance activity must ensure that previous maintenance actions required by suffixes A, B, and C have been performed as well.

(b) U. S. Navy - A single letter suffix indicated that a major or minor maintenance action, not involving a primary component replacement, had taken place. The significance of the ABC sequence is the same as the Army system except, that a suffix X for X-ray examination is added to any other letter resulting in a two-letter suffix.

(c) U. S. Navy - For major maintenance involving ammunition breakdown and replacement of a component, the item was recertified at the same time. Because of the recertification, a letter R was added to the caliber and type two-letter prefix resulting in an entirely new lot number.

(d) Navy and Army - The use of dashes for spacing between lot number elements was required.

(e) Navy and Army - When maintenance had been performed as directed resulting in the application of a suffix, a new data card was prepared for each round processed (or the old data card is changed) by adding the suffix and a notation that the required maintenance had been performed. For example, the notation for the suffix •D• would be the fourth notation, following the notations covering maintenance actions pertaining to suffixes A, B, and C.

e. New Style Lot Numbering System (MIL-STD-1168A/B) The standardization of ordnance lot numbering was based on the common requirements of the various lotting systems of manufacturer identification and sequential numbering of quantities of identical items. Essential service requirements of homogeneity grouping and age identification were added resulting in a 13-character basic lot number. Provisions were then added to annotate lots by letters to indicate a nonstandard lot number or a reworked basic lot. Standard lot numbers are constructed as follows:

CRA78K001-415A

(1) Characters 1-3. Manufacturer's identification as listed in MIL-HDBK-1461 (no incorporated into MIL-STD-1168B). Manufacturers with one- or two- character codes will have remaining positions filled with dashes (e.g., P-- or PA-).

(2)Characters 4 & 5. A two-digit numeric code identifying the year of production (e.g., item produced in 1978 is coded 78).

- (3) Character 6. A single alpha code signifying month production of the lot was initiated(e.g., A-January, B-February, etc. I is not used.).
- (4) Characters 7-9. Lot interfix number, sequentially from 001 thru 999.
- (5) Character 10. Hyphen required for all standard lots. For nonstandard lots or lots requiring special codes the hyphen is replaced by an alpha (such as H-Hybrid Lot, M-Modified Lot, V-Overhauled Lot, see MIL-STD-1168A for a complete list of codes).
- (6) Characters 11-13. Lot sequence number from 001 thru 999. (The next lot produced after lot 999 requires an interfix number change and reverts to 001).
- (7) Character 14. A single alpha character suffix is added after the final position to signify the basic lot has been reworked. For lots reworked more than once, sequential alphas are assigned.

E-5 DATE OF MANUFACTURER. The ALN format specified in MILSTD-1168A/B was the first to provide direction on Date of Manufacture. MILSTD-1168 did not provide guidance on how to include or format date of manufacture. Many reclassification actions require the end user to reclassify certain material prior to a specific date of manufacture, or combination of manufacturer/date of manufacture. In many cases, the date of manufacture is stenciled on the

box/asset as LDD 04/70 or MFR 3/67. This requires verification of the asset in storage to ensure proper reclassification. In several instances of recording the lot number on documents, the date of manufacture was included with the lot number. An example of this using the MILSTD-1168 format is OPI-1-19-0673. This is the same lot number as OPI-1-19, the exception being the addition of the date of manufacture. Date of manufacture was required by OP-5.