



**DEFENSE LOGISTICS AGENCY
LAND AND MARITIME
P.O. BOX 3990
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15 March 2019

MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

**SUBJECT: Engineering Practice Study to Standardize Retention Data Requirements
for Multiple Commodities of MIL-STD-790.
Project Number 59GP-2018-007**

It is requested that your office take the necessary action to reflect completion of the subject documents dated, 15 March 2019.

Should a copy be required, the subject documents are available from the following DLA Land and Maritime web page.

<https://landandmaritimeapps.dla.mil/programs/milspec/>

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/signed/
Michael Radecki
Chief
Electronic Component Branch

ENGINEERING PRACTICES STUDY

TITLE: SURVEY TO STANDARDIZE RETENTION DATA REQUIREMENTS FOR
MULTIPLE COMMODITIES.

15 March 2019

STUDY PROJECT (SEE ATTACHMENT 1)

FINAL

Study Conducted by DLA LAND AND MARITIME

Prepared by:

Andrew Ernst

I. **OBJECTIVES:** DLA Land and Maritime-VAT conducted a survey on the data retention requirements for specifications that have MIL-STD-790 requirements for related electronic devices. The purpose of this survey (in **Attachment 1**), was to obtain input from the manufacturers, military services, and user communities on the preferred length of time and type of records to maintain. The survey results are to help determine the length of time and types of records that can be aligned across DLA general specifications.

II. **BACKGROUND:** The general specifications data retention requirements are not the same for all electronic commodities. One example of an inconvenience that this poses is that when evaluating devices on an electronic system the availability of data is different depending on the device type even though they are all on the same circuit board or system. The general specifications for electronic devices currently specify different data retention times, and types of data required, to be maintained. The general specifications either specify their own individual requirements or use the requirements from MIL-STD-790. An example of some of the general specification data requirements are listed below.

Current MIL-STD-790 retention times:

5.2.18.1 **Records to be maintained.** Records shall be legible and maintained which will adequately describe the processes, materials, inspections, and tests which affect the quality of the device for appropriate amounts of time such that quality concerns and customers are properly supported (e.g. conformance testing records). The records pertaining to production processes, incoming, and in-process inspections should be retained for a minimum of 3 years (7 years for space level) and those pertaining to performance verification retained for a minimum of 5 years (7 years for space level) after performance of the inspections. Records pertaining to alternate methods (with qualifying activity approval), conformance testing shall be retained for 5 years (7 years for space level) after the process or materials affected have been removed from the qualified flow.

Proposal. DLA Land and Maritime surveyed the military and Industry on a proposal to align the data retention requirements in DLA general specifications for electronic devices. It includes retaining all design, manufacturing, testing, and quality records for each lot, for 15 years after delivery of the product (see attachment 1 for survey).

III. **RESULTS:** This study emphasis was placed on the 15-year retention requirement that would be imposed. There was a mixed result regarding whether or not the 15-year retentions time was acceptable. The responses were tabulated with 7 yes and 5 no votes. Currently manufacturers stated that the data retention time for military product varies from 5 to 25 years while some replied that the retain data indefinitely. While retention times for commercial product varies from 0 to 10 years.

Retaining records electronically, manufacturers were mainly concern with storage, backup storage, data corruption, software obsolescence and cost of said storage. All lot data can be retained, including travelers, incoming inspection, R&R, screening, etc., but some manufacturer question why? That only data that should considered for any extended retention is "deliverable data". There are items that should not be tied to delivery of the end item, such as training, calibration, receiving inspection, environmental controls, and process control records.

The financial hardship, if any, would be in the labor cost to scan, organize, and the storage of all data. The users of military devices stated that they would like to see raw material certs and plating information retained.

One item that came out from the study that needs to be clearly defined is the actual start of the retention time. The general consensus was that the start time should be based on the lot date code to enable the management of records on the manufacturer's side easier.

IV. **CONCLUSIONS:** Due to the mixed reactions of the 15-year data retention, and the different technologies involved there will be no DLA group initiated specification changes.

V. **RECOMMENDATIONS:** DLA Land and Maritime recommends a new EP study to survey the Military and Industry on a 10-year data retention proposed, defining a start of retention time and the actual data that needs to be retain.

Attachment 1

Proposed requirement verbiage to be added to DLA Land and Maritime general specifications record retention section:

Record retention. The manufacturer of QPL devices (all class levels) shall retain all design, manufacturing, testing and quality records for each lot for a period of 15 years after delivery of product. The records shall include as a minimum:

- a. Design
- b. Manufacturing
- c. Travelers
- d. Inspection
- e. Test results
- f. Screening results
- g. Qualification plans and results
- h. Quality conformance test results
- i. Rework
- j. Failure analysis and corrective actions
- k. TRB decisions
- l. Training
- m. Customer returns

The records may be retained in the form in which they were originally defined but electronic media is preferred and a copy shall be provided to the qualifying and/or procuring activity as requested.

Survey Questions:

1. What is the standard amount of time manufacturers retain data for military products? For commercial products?
2. Is a proposed 15 year retention time acceptable?
3. What concerns do manufacturers have with retaining records electronically?
4. Can all lot data be retained, including travelers, incoming inspection, R&R, screening, QCI, etc. If the answer is no, what data can be retained?
5. What financial hardship, if any, would this endeavor impose?
6. For users of military devices, are there any additional types of data that you would like to see retained?