

UNITED STATES MARINE CORPS
Logistics Operations School
Marine Corps Combat Service Support Schools
Training Command
PSC Box 20041
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MTMOC 2305

STUDENT OUTLINE

MODIFICATION CONTROL PROGRAM

LEARNING OBJECTIVES

1. **TERMINAL LEARNING OBJECTIVE**: Given the reference material, completed modification control forms, and statements pertaining to the procedures for establishing a modification control program, use established equipment modification control procedures, per MCO P4790.2, TM 4700-15/1, and the applicable modification instructions. (3510.2.19)

2. **ENABLING LEARNING OBJECTIVE**: Given the reference material, completed modification control forms, and statements pertaining to the procedures for establishing a modification control program, use established equipment modification control procedures, per MCO P4790.2, TM 4700-15/1, and the applicable modification instructions.
 - a. Identify equipment that will be placed in the modification program. (3510.2.19a)

 - b. Identify the modification instructions (MI's) that are applicable to equipment. (3510.2.19b)

 - c. Identify the methods of controlling the modification program. (3510.2.19c)

 - d. Identify the records used for the control of the modification program. (3510.2.19d)

 - e. Audit the modification control records. (3510.2.19e)

 - f. Identify the types of modifications and time compliance. (3510.2.19f)

OUTLINE:

1. ESTABLISHING A MODIFICATION CONTROL PROGRAM.

a. Modification Instruction (MI) Requirements

(1) Equipment modification consists of those maintenance actions performed to change the design or assembly characteristics of equipment systems, end items, components, assemblies, subassemblies, or parts in order to improve equipment functioning, maintainability, reliability, and/or safety characteristics. Field recommendations for equipment improvement, Product Quality Deficiency Reports (PQDR's), beneficial suggestions, and so forth, frequently establish the requirement for equipment modifications.

(2) Requirements for equipment modification, including the detailed step-by-step procedures for accomplishment, are published as modification instructions (MI's). MI's will identify the following:

(a) The specific types and items of equipment to be modified as well as the maintenance resources, skills, and time necessary for their accomplishment.

(b) The MI will also specify the echelon of maintenance authorized to perform the modification.

(c) The equipment to be modified will be identified in the MI by nomenclature, ID number, NSN, and the manufacturer's serial number for individual equipment, when appropriate.

(d) The MI will also identify the modification kit by NSN and quantity or parts and fabrication materials when kits are not prescribed.

(3) Marine Corps equipment shall be modified only as directed by the Commandant of the Marine Corps.

b. The owning unit is responsible for ensuring that all modifications required on unit equipment have been completed and are recorded on the appropriate modification records. To accomplish this, using units will establish a modification control program.

c. Modification Requirements Determination

(1) Upon initial receipt of new equipment items and prior to placing the equipment in service, an acceptance LTI will be performed by maintenance personnel from the intermediate maintenance activity and organizational maintenance personnel respectively. An important part of that inspection is to determine if all required modifications have been properly completed.

(2) Upon completion of the inspection, equipment records will be updated and ERO's initiated requesting that the missing modification(s) be applied.

d. Urgency of Required Modifications

(1) Modifications designated as "URGENT" are required to prevent death or serious injury to personnel, prevent major damage to equipment, or make changes which are considered so essential to equipment that their application must be accomplished at the earliest possible time.

(a) Urgent MI's may specify a required completion date which can be found in the "Time Compliance Period" section of the MI. When the urgent MI indicates "Upon Receipt," enter "N/A" for the required completion date on the modification record.

(b) Urgent MI's may require that the equipment be placed on deadline or its use sharply curtailed until the modifications are applied.

(c) Instructions restricting operating conditions may be passed down by message prior to the unit receiving the actual MI.

(2) All other modifications are designated as "Normal" and are accomplished on a planned schedule basis within one year of the effective date of the MI, unless otherwise indicated.

e. Modification Control

(1) Commodity Managers Modification Control Records, NAVMC 11053 and NAVMC 11054 or an automated system containing the same information as on the records will be maintained by

unit commodity managers based on information obtained from other records and the physical observation of the equipment.

(a) Commodity managers modification control forms will be used by both FMSS and non-FMSS supported units.

(b) Either a combination of NAVMC's 11053 or 11054 may be used by the commodity section depending on the density of equipment versus the number of modification instructions published for an item of equipment.

(c) The only difference between NAVMC 11053 and NAVMC 11054 is the quantity of modification instruction (MI) numbers compared to the serial numbers.

(d) NAVMC 11053 allows the commodity manager to list more MI numbers than equipment serial numbers and NAVMC 11054 allows for more equipment serial numbers than MI numbers.

(2) The command must also establish a single point responsible for monitoring the modification control program.

(a) Units required to assign an MMO, will assign the MMO with the responsibility for establishing and monitoring the modification control program.

(b) When a unit is not required to assign an MMO, the commodity maintenance manager will be the individual responsible for modification control.

(c) Equipment commodity managers will maintain modification records per TM 4700-15/1.

2. PREPARATION OF THE MODIFICATION CONTROL RECORDS (MANUAL CONTROL)

a. Starting the Modification Control Program. Regardless of what system is selected by the unit to control modifications, the following tasks must be accomplished:

(1) The unit must first determine what equipment it is authorized and possesses.

(a) The source documents for deciding what equipment the unit is authorized are the T/E and the unit allowance list.

(b) Modifications are keyed to ID numbers rather than TAM control numbers, NSN's, or nomenclature. The unit should ensure that as the equipment is identified, the equipment ID numbers are recorded. A separate modification control record is prepared for each ID number.

(2) The next step is to determine which MI's apply to each type of equipment, the SL-1-2 and TI-5600 can be used to make this determination. The unit should also review their publications Listing (PL) to make sure the required MI's are on order and are being distributed to the correct location.

b. Completion of the Commodity Managers Modification Control Record (NAVMC 11053/NAVMC 11054) for Manual Control.

(1) Either or both forms may be used by the commodity section depending upon the density of equipment versus the number of modification instructions issued for an item of equipment.

(2) A modification control record will be prepared for each major end item of T/E or special allowance equipment for which a modification instruction has been issued.

(a) A separate modification record will be prepared for each ID number. (M939 series vehicles; such as the M923, ID No. 08087A; M925, ID No. 08088A; M931, ID No. 08085A, and so forth.)

(b) Modification instructions on components/secondary reparable will be recorded on the record for the end item.

(3) Preparation instructions.

(a) First, the equipment nomenclature, TAM number, and ID number must be determined and the information entered in the blank spaces at the top of the form.

(b) In the area on the form that calls for the modification instruction numbers, all of the MI's pertaining to the ID number that were identified in the SL-1-2 and TI-5600 will be listed.

(c) The MI category is the next area to be completed. The category as identified by the instruction, "U" for urgent and "N" for normal, will be annotated below each MI.

(d) The required completion date area will be completed as follows:

1 For normal MI's, the required completion date is one year from the effective date of the MI, unless otherwise indicated.

2 For urgent MI's, the required completion date is normally found in the "Time Compliance Period" paragraph of the MI. If the urgent MI does not have a time compliance paragraph or indicates "upon receipt," "N/A" should be entered in this area.

(e) Next, the serial numbers of all end items pertaining to the ID number will be listed in the appropriate area on the left side of the form. If the quantity of end items exceeds the available space provided, preparation of multiple sheets for the particular ID number will be required. Information on unserialized equipment can be maintained by quantity only unless local serial numbers are assigned.

(f) In the remaining columns enter the appropriate action code on the form; the following action codes along with the Julian date the action was completed for action codes NA, C, and V must be entered on the maintenance section's control record. Make sure that any entry that is temporary in nature is entered in pencil. Included in this category are instructions which apply to secondary reparable components, remarks, and action codes PR, AR, and the ERO number. All other entries should be made in ink.

1 NA (Not Applicable). Since some MI's only apply to specific serial numbers, action code "NA" will identify those items to which the MI does not apply.

2 PR (Publication Required). This code is used to identify those MI's for which the unit requires the publication in order to verify/complete the modification. The document number for the required publication must be entered in the "remarks" column. The entry of the date is not required in the column along with the action code.

3 AR (As Required). This code is used to identify those MI's which apply to an item when the equipment requires a special repair action, such as fifth echelon MI's for rebuild, contact team application, or when a specific component is repaired/replaced. The entry of the date is not required in the column along with the action code.

4 C (Completed). This code identifies equipment modified while in custody (on the property records) of the using unit to include items modified for the using unit by the supporting maintenance activity.

5 V (Verified). This code indicates that prior application of the modification has been verified (normally this code is utilized upon initial receipt of the equipment). This action code also indicates that the modification is complete.

6 ERO No. The ERO number will be used to identify those items which have been identified as requiring modification. It indicates a modification has been requested on the ERO from the maintenance facility or the equipment is waiting to be modified.

(g) The remarks column on the form may be utilized to provide amplifying information on a specific MI or end item serial number. Some examples are: supply document numbers for the modification kits or MI on requisition, nonavailability of equipment; such as temporary loan or deployment; and indication of the secondary reparable the MI is applicable to.

(h) Finally, make sure that any entry that is temporary in nature is entered in pencil. Included in this category are instructions which apply to secondary reparable components, remarks, and action codes PR, AR, and the ERO number. All other entries should be made in ink.

c. Responsibilities of the Modification Control Point

(1) The using unit's modification control point collects the prepared commodity manager modification control record, equipment, and equipment records and determines if the MI's have been performed.

(2) When the modification control point at the using unit is unable to determine through inspection of the equipment/equipment records that the modification has been

completed, the equipment is evacuated to the next higher echelon of maintenance for determination and/or completion, as required. If the MI has been verified as completed, the maintenance section modification control record will be annotated with a "V" and the date verified in the appropriate column by the end item serial number.

(3) If the equipment is evacuated to the next higher echelon of maintenance:

(a) The using unit modification control point will:

1 Initiate a support maintenance (third echelon) ERO to perform the evacuation.

2 Annotate the ERO number in the appropriate modification control record column by the serial number.

(b) The support maintenance unit will:

1 Determine if the equipment requires modification.

2 Determine if the equipment has been modified.

3 Perform the modification, if required.

4 Annotate the ERO with the results of the determination and actions completed.

5 Update the equipment record.

(4) When the equipment is returned to the using unit, the modification control point will verify the equipment records, annotate the commodity manager modification control record with the appropriate action code and Julian date, and informs the MMO so he can update his records.

(5) When an item requiring modification control has been dropped from the unit's accounting records, it is not necessary to reconstruct modification control records. The only requirement is to neatly delete the item from the records and indicate the reason for the deletion (for example, LUP, dropped excess to needs, replaced by new model and so forth).