

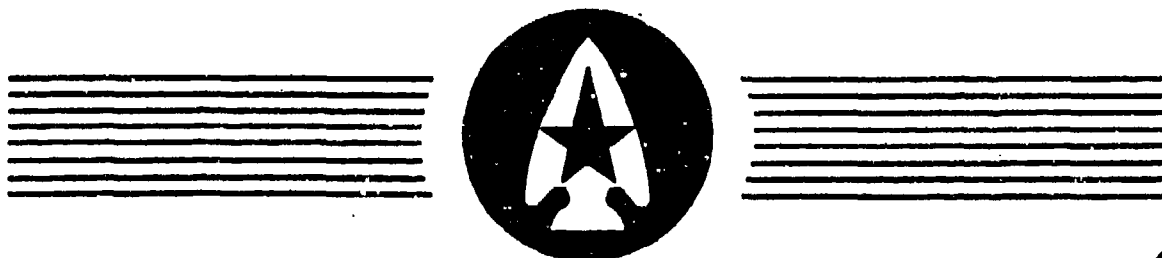
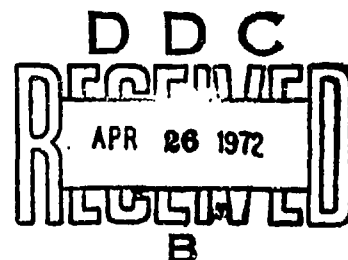
AD 741886

UNITED STATES ARMY
COMBAT DEVELOPMENTS COMMAND
DIRECTORATE OF ORGANIZATION

QUALITY IMPROVEMENT OF THE TOE SYSTEM (U)

PHASE II

ACN 18610



30 MARCH 1972

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SECTION I

INTRODUCTION

1. The Organization and Equipment (O&E) Division, Organization Directorate, HQ USACDC was tasked by the Director of Organization (See Appendix A) to expand the review of the TOE system that was initiated in February 1971.

The first phase of this study was completed in June 1971 and the ~~study~~ recommendations were submitted to DA on 2 July 1971. The second phase of this study included an examination of specific areas identified but not addressed in Phase 1, evaluated recommendations for improving the quality of the TOE system, and identified ways of further automating the development and processing of TOE.

2. Areas addressed during Phase II of the study included:

- a. Refining edit programs and procedures for a single change system.
- b. Costing personnel and equipment in plan TOE (PTOE).
- c. Identifying problem areas in the TOE system that are most in need of improvement.
- d. Simplifying procedures by which individuals and commanders may submit recommendations for improving the TOE system or specific TOE.
- e. Standardizing position titles, abbreviations and the remarks used in TOE.
- f. Changing the current TOE format to make it more responsive to the needs of the Army staff and the user.

- g. Bringing the TOE and MTOE systems into closer synchronization.
 - h. Automating the supporting narrative submitted with draft plan TOE (DPTOE).
 - i. Automating the status reporting system used in TOE development.
3. Data for Phase II of this study was collected:
- a. By surveying TOE users and proponents for recommendations on how to improve the current system.
 - b. By reviewing applicable regulations and directives.
 - c. During meetings with applicable elements of the DA staff and Army agencies to discuss and evaluate proposals for further automation of the TOE system.
4. Action has been initiated to implement the Phase I study recommendations. Other actions initiated during Phase I of the study, such as the test at the Engineer Agency to develop procedures and to identify the problem areas associated with a single change system, have been completed and the results included in this report.
5. Close coordination and liaison has been maintained with CDC's Directorate of Management Information Systems (DMIS), Computer Sciences Corporation (CSC) contract study personnel, the Army Security Agency (ASA), the US Army Management Systems Support Agency (USAMSSA), and ACSFOR, HQDA.

SECTION II
CURRENT STATUS OF PHASE I RECOMMENDATIONS AND
DEVELOPMENT OF TOE PROCESSING PROGRAMS

1. The Phase I Study Report recommended:
 - a. That a single change system be established.
 - b. That the requirement to conduct area of interest review of all TOE changes be rescinded and that only changes with major personnel and equipment implications receive area of interest review.
 - c. That the effective dates for DA directed personnel actions be changed from a quarterly to a semi-annual basis.
2. Department of Army, on 17 August 1971 approved the concept of a single change system and requested that implementation start as soon as possible (Appendix B). On 7 October 1971, a letter was sent to the United States Army Management Systems Support Agency (USAMSSA) (Appendix C) outlining the program changes necessary to implement a single change system, and identifying system improvements to be incorporated in the revised programs. File layouts for the new programs were furnished USAMSSA on 1 November 1971. On 24 November 1971, USAMSSA concurred with the proposed layouts and indicated that the revised programs were compatible with their ADP system (Appendix D).
3. The Data Processing Field Office (DPFO), a Class II activity under CDC's Director of Management Information Systems, initiated design of the revised

TOE processing programs to provide the capability to transition to a single change system. These programs are to be operational by 1 July 1972 and will result in a reduction in direct access storage requirements and machine operating time. The revised programs will provide the following capabilities:

- a. Provide a transaction or suspense file as a repository for unpublished changes.
- b. Provide for use of the augmentation column in Section II and III of the TOE.
- c. Enlarge the historical file to include not only rescinded TOE, but also superseded changes and an audit trail of all TOE actions.
- d. Provide for the incorporation of additional skill identifiers in Section II of TOE.
- e. Provide a file of standard personnel remarks and explanation thereof.
- f. Provide for use of standard position titles.
- g. Provide for an expanded audit of equipment.
- h. Provide a transaction register printout for use by the action officer that will reflect changes made as a result of the updating process.
- i. Provide a control and status reporting system for TOE actions that are under development.

4. USACDC plans for transitioning into a single change system are outlined below:

a. Submit Consolidated Change 300-51 to TAG NLT 1 April 1972.

b. Submit Consolidated Change 300-52 to TAG NLT 30 June 1972. This will be the last quarterly publication of a consolidated change.

c. Effective 1 July 1972 all changes will be entered on the suspense file on a continuing basis. On 1 September 1972 and 1 March 1973 input into the suspense file will be cut off and extract changes published under the semi-annual change system. (See Appendix E for a narrative outline of how the semi-annual change system will function).

5. The recommendation to limit area of interest (AOI) review to changes that have major personnel or equipment implications was conditionally approved by DA. They indicated that a solution that is mutually acceptable to CONARC, USAMC, and USACDC must be negotiated between these three commands. Letters recommending area of interest (AOI) review of TOE changes be limited to those having major personnel or equipment implications or effecting the units operational capability or organizational concept, were dispatched to CONARC and USAMC. On 1 March, CONARC concurred in the recommendation to limit AOI. A reply has not been received from USAMC. Copies of the correspondence are at Appendixes F and G.

6. The proposal to change the effective dates of DA directed personnel actions from a quarterly to a semi-annual basis has been approved. AR 611-1

has been revised to incorporate this change. The revised AR has been dispatched to TAGO for printing and subsequent distribution to the field.

7. The Systems Analysis Group of CDC is developing a program for costing the personnel and equipment listed in Sections II and III of a TOE. This program will be compatible with those being developed by CDC's Directorate of Management Information Systems (DMIS). Personnel costs will be based on those reflected in Appendix B of AR 37-2. Equipment costs will be based on the latest cost figures for items that are reflected in SB 700-20.

8. On 16 February 1971, the Computer Sciences Corporation (CSC) began a contract study to design an expanded Management Information System for USACDC. Phase I of this study included design of several modules that can be incorporated into the revised TOE system. Design of the modules has been completed and programming them is scheduled for FY 73. When programmed and incorporated into the TOE system these modules will provide the capabilities listed below:

a. A general update program designed to accomplish the following:

- (1) Flag personnel and equipment changes.
- (2) Enter one for one changes into the suspense file.
- (3) Identify changes other than those that are on a one for one basis

which require the use of human judgement before being applied to the published file.

b. Edit for items listed in AR 310-34 and flag those items that are not included in the DPTOE.

9. The following capabilities should also be added to the TOE processing system during FY 73.

a. An expansion of personnel edit programs to provide for an audit of standard of grade authorizations and of supervisory levels (AR 611-201).

b. Provision for the automated computation of selected MACRIT (AR 570-2).

c. Provision for the automated computation of electric power and fuel consumption requirements.

d. Adding the capability to retrieve on a multiple set of parameters. This capability will enhance the usefulness of the file to personnel needing retrieval of data for doctrinal and conceptual studies, materiel requirements, tests, evaluations, and wargames.

SECTION III

SURVEY TO IDENTIFY IMPROVEMENTS

NEEDED IN TOE SYSTEM

1. In June 1971, the Organization Directorate dispatched a letter to DA, CONARC, the major overseas commands, and TOE proponents within USACDC. The letter requested recipients give their opinion of a proposed suggestion system that could be used to submit recommendations for improving the TOE system or specific TOE, and to identify the ten areas in the TOE system in greatest need of improvement (See Appendix H).
2. Replies to the questionnaires did not identify new problem areas. Most of the replies simply answered the questions posed in the questionnaires (See Appendix I).
3. A majority of the replies favored the adoption of the new suggestion system, to include the adoption of a simplified suggestion form. The form, if approved by DA, would be supplied to the field through AG channels. A replica of the form and instructions on how to fill it out could be included in Section I of all newly published TOE. The filled out suggestion form would be mailed directly to CDC Headquarters. Organization Directorate personnel would review the suggestion and those appearing to have merit would be mailed to TOE proponents for consideration, appropriate action, and reply to the suggestor.

Those lacking merit would be answered by Organization Directorate personnel with an explanation as to why the suggestion could not be used and thanking the suggestor for his interest.

4. Replies on the proposed suggestion system also recommended that CDC publicize the new suggestion system, as well as the system in current use, through articles in Army Magazine, P&S Magazine, Army Times, and Branch publications, such as those published by the Infantry and Field Artillery Schools. Adoption of the system outlined in paragraph 2 would not bar the submission of a recommendation under the Army suggestion program. The proposed system, however, would get the recommended changes to the TOE proponent much faster, thereby providing quicker implementation of valid recommendations.

5. The majority of users favored retention of the current TOE format. This subject is discussed in greater detail in Section V of this report. The replies also indicated that the user would like to see the recap tables updated periodically. This could be accomplished by republishing Section II and III of the recap as a change, and indicating on the cover sheet the changes applicable to component tables that are incorporated in the recap. By publishing the updated recap as a change there would be no change in the recaps Standard Requirements Code (SRC). Republishing Section II and III of the component table after 25% of the lines are changed or 5 changes have been published also appears feasible.

6. Opposition was expressed to the inclusion of expendable items that are classified as mission essential in the TOE. Replies to this question indicated that including such items in the TOE would further complicate the implementation of a centralized property accountability system.
7. A recommendation for publishing the supporting narrative submitted with draft plan TOE (DPTOE) as a section of the TOE document was not favored. (See paragraph 2, Section V for a more detailed discussion of this recommendation.)
8. Review of the questionnaires revealed a need for instruction on the TOE and MTOE systems in officer and NCO career development courses. A letter recommending CONARC include instruction of this subject in officer and NCO career development courses is being prepared for dispatch to CONARC.
9. All of the replies favored standardization of personnel and equipment remarks to the maximum extent possible. A recommended set of standard personnel remarks are listed on pages 4-6 of Appendix M. A system for submitting recommendations for standardizing additional personnel remarks to DA for consideration is also outlined. A satisfactory system for standardizing equipment remarks has not been identified. A recommendation is being submitted to DA to retain the current guidelines for equipment remarks.

SECTION IV

STANDARDIZATION OF POSITION TITLES AND ABBREVIATIONS

1. An area which promises to provide a significant potential for increasing the automated processing of TOE & MTOE is the standardization of position titles and abbreviations used in TOE. One of the questions posed in the survey of TOE users (See Section III) dealt with this subject. The majority of the replies favored standardization and foresaw no degradation of the TOE product if standard titles and abbreviations were used. During the Organizational Phase Symposium sponsored by the Organization Directorate of USACDC on 7-9 December 1971, however, several representatives of proponent groups and agencies expressed concern that the TOE would be depersonalized if standard position titles were adopted. Because of this concern, 23 H-series TOE were selected and a check made to see how many of the enlisted titles used in these TOE were one of the standard titles reflected in AR 611-201. The table at Appendix J indicates that more than 90% of the enlisted titles used in these TOE are reflected in the AR. Based on this review, it is felt that use of standard titles is feasible and will not depersonalize the TOE document as suggested by attendees at the symposium.

2. Most enlisted MOS have several approved position titles. The problem lies in the fact that only one is reflected on the MOS tape. All five positions in the alpha numeric group of an MOS are reserved for a specific purpose.

Discussions with action personnel of PERSINSCOM revealed that the seventh position on the MOS tape is used only to indicate the difference between a military (numeral 4) and a civilian (numeral 5) MOS. This seventh position could be used for an alpha or numeric key indicating the position title for the specific MOS that is to be used. A review of AR 611-201 revealed that the average enlisted MOS has seven titles, but up to 16 were noted for several MOS. Using an alpha system there could be up to 26 standard titles used for each MOS. A single numeric could be used to indicate position titles common to numerous MOS (Battalion or Company Commander, RTO, 1st SGT, etc.). There is space in Section II of the TOE to print the Position Code in a column between the position title and the change number column. The position code would also provide an additional means of retrieving data. Such a tape would not be difficult to construct but it would necessitate the revision of ARs 611-101, 112, 201 and the MOS tape published by PERSINSCOM. At Appendix J is an example of how position titles could be coded and how the abbreviated title would appear on the MOS tape, in the ARs, and in Section II of the TOE. If this system is adopted new titles would be submitted to DCSPER for review and approval and subsequent publication in the AR 611 series. No new title could be used until it was approved by DCSPER.

3. A review of the abbreviations used in TOE revealed that about 30% of those used are non-standard. To determine what degree of standardization might

be achieved, a machine listing of position titles was reviewed to determine what words were used most frequently. The most frequently used abbreviation was then identified for those words lacking an approved abbreviation. The abbreviations, after staffing with the proponent groups within USACDC, were submitted to ACSFOR with a recommendation that they be forwarded to TAG for inclusion in the next change to AR 310-50 (See Appendix K).

Effective 1 January 1972 TOE proponents within CDC were required to use standard abbreviations in position titles.

SECTION V

TOE FORMAT

1. Numerous suggestions were made prior to Phase I of the study to modify the current TOE format. These included eliminating the publication of the reference list in Section I of the TOE, dropping the use of personnel and equipment remarks, and changing the method of listing personnel in Section II of the TOE. The survey of TOE users and proponents (see Appendices H and I) indicated that the user generally is satisfied with the current TOE format and sees no need for major redesign.
2. The recommendation to publish the supporting narrative as part of the TOE document was not favored by the majority of those replying to the TOE survey. There was some support for publishing the information as a supplement to the TOE and distributing it on an "as required" basis to the field. Although such information may be of value to the inexperienced commander and staff officer, the TOE is not the appropriate document for disseminating such information. The TOE is designed to serve as a requirements document not as a field manual. Organizational data should be provided in field manuals and in school course supplements published by the service schools for use in career development courses. A letter will be sent to CONARC recommending that CDC agencies provide supporting narrative to the co-located CONARC schools for inclusion in applicable field manuals and school course supplements. At agency level within CDC such

information is provided to personnel who prepare doctrinal FMs.

3. The survey did indicate a preference for use of the augmentation column rather than the augmentation paragraph and for the use of standardized position titles and remarks whenever possible. The revised TOE processing programs will provide the capability of using the augmentation column and a system of standardized personnel remarks (See Section II). In addition, if the recommendation for standardized position titles is approved it could result in the addition of a position code column in Section II of the TOE (See paragraph 2, Section IV of this report).

4. The Vertical TAADS Branch of ACSFOR has made several changes in MTOE format to bring the TOE and MTOE systems into closer synchronization. Adoption of these changes, and implementation of a single change system by 1 July 1972 should place the TOE system in a position to drive the MTOE system. The use of standardized personnel remarks and the adoption of standard position titles should further enhance the effort to bring the two systems into greater synchronization.

SECTION VI

UPDATE OF G-SERIES ENGINEER TOE

1. In April 1971, the Engineer Agency of CDC was tasked to update 58 Engineer G-series TOE. The objective of the test was to develop simplified procedures for updating published tables. The agency was requested to divide its recommended changes into the following groups:

a. Changes that could be implemented by CDC without further staffing and approval by DA. Changes falling into this category included DA directed personnel and equipment changes, editorial corrections, changes not involving personnel or major PEMA equipment increases and changes affecting the units mission or operational capability. No supporting narrative was required to justify this type of change.

b. Changes involving personnel or PEMA equipment increases or affecting the mission or operational capability of the unit required a brief supporting narrative. After review by HQ, USACDC these changes were submitted to DA for review and approval.

2. The Engineer Agency limited changes to the following:

- a. Editorial corrections,
- b. Personnel and equipment remarks.
- c. Updating of MOS and standard of grade.
- d. Recomputation of engineer, wheel vehicle mechanic, radio repairmen, generator operator and mechanic requirements using the latest Manpower

Authorization Criteria (MACRIT).

- e. Application of outstanding Basis of Issue Plans (BOIP).
- f. Deletion of expendable items of equipment.
- g. Splitting out of secondary items of equipment (AR 725-1).
- h. Updating of equipment authorized by AR 310-34.
- i. Application of applicable changes listed in the check list provided in

Appendix C to CDC Memo 15-2.

- j. Application of DA directed (non-deadline) actions.
- k. Current austerity measures.

3. DA staffing of changes involving personnel or PEMA equipment increases included ACSFOR, DCSPER, DCSLOG, ACSCE and Office, Chief of Engineers. Changes that included medical personnel or equipment were staffed with the Surgeon General. Area of interest review was not conducted. The requirement for the reproduction of copies for DA staffing was reduced to fourteen (11 DA, 1 CDC, 1 Gp, 1 Agency) instead of the seventy-three normally produced for DA and area of interest review. The changes as they were approved by DA were incorporated into an on-going consolidated change. The last increment will be incorporated into Consolidated Change 300-52, which is scheduled for dispatch to TAG on 30 June 1972.

4. A summary of the changes applied to these 58 TOE is shown at Appendix L. Results of the test indicate that:

a. A system for verifying DA approval and effective dates for Basis of Issue Plans (BOIP) needs to be developed. ACSFOR and USAMSSA records on the status of BOIP often varied considerably. Maintenance of the BOIP tape by CDC, as part of BOIP automation program may resolve this problem.

b. Periodic review and updating of published TOE is worthwhile. Consolidated Changes while achieving a limited update of the published files have failed to maintain them in a status that can be used to drive the authorization or MTOE system.

c. CDC and DA in the past have placed major emphasis on development of new and revised TOE. Current emphasis on production of a complete family of H-series TOE is indicative of this trend.

d. A system whereby a balance is achieved between maintenance of published tables and development of new TOE can be achieved by more effective planning and allocation of resources within CDC and at DA. Procedures for updating published tables under a single change system are outlined at Appendix E.

SECTION VII

AUTOMATING THE SUPPORTING NARRATIVE AND

THE STATUS REPORTING SYSTEM

1. One of the objectives of Phase II was to examine the feasibility of automating the supporting narrative submitted with draft plan TOE (DPTOE). The capability now exists in the REREQ system to compute power and fuel requirements for a TOE unit. CDC's Maintenance Agency now computes the requirement for mechanics by automated means. The latter program is based on a MACRIT that has been automated. Other MACRIT and quantitative data provided in the supporting narrative is adaptable to automation. Phase III of the Quality Improvement Study will attempt to identify a methodology for automating the narrative and will identify those MACRIT which should be automated.
2. Programs for maintaining a record of the status of TOE actions on the computer are now under development. Samples of the report layout are at Appendix N. An automated status report system will provide an audit trail of TOE actions and enable status reports designed for the use of DA, the Director of Organization, the Chief, Organization and Equipment Division, as well as the branch chiefs and desk officer to be extracted from the same data base. These programs will be operational NLT 1 July 1972.

SECTION VIII

CONCLUSIONS

1. New TOE processing programs that will enable CDC to implement a single change system are under development. The capability of using the augmentation column, and operating improvements that provide for a reduction in storage media requirements and a decrease in machine operating time are included in the new programs. These programs are scheduled to be operational on 1 July 1972.
2. A program that will cost the personnel and equipment listed in new or revised TOE is also under development. This program is being developed by CDC's Systems Analysis Group and will be compatible with the new TOE processing programs described in paragraph 1.
3. The survey of TOE users identified no new problem areas. The survey did indicate however, that the user:
 - a. Supports the adoption of a simplified system of submitting suggestions for improving the TOE system or specific tables directly to CDC.
 - b. Favors retention of the TOE reference list, personnel and equipment remarks, and the current TOE format.
 - c. Prefers the use of the augmentation column rather than the augmentation paragraph.
 - d. Favors updating the recap tables periodically.

e. Does not feel that the supporting narrative should be published as a part of the TOE document.

f. Feels that standardization of position titles, abbreviations and the remarks used in TOE has considerable merit.

4. Standardization of position titles, abbreviations, and personnel remarks is feasible. Standardization of equipment remarks does not appear feasible. Standardization of position titles will necessitate revision of the AR 611 series and the MOS tape produced by PERSINSCOM.

5. Automation of the supporting narrative appears to be feasible. Phase III of the Quality Improvement Study will identify a methodology which can be used to automate the narrative submitted with DPTOE.

6. Selected MACRIT should be identified for automation during Phase III of the study. Automated computation of all MACRIT is not feasible.

7. A better interface is required between TOE and Basis of Issue Plans (BOIP).

8. Instruction on the TOE and MTOE systems should be provided in Officer and NCO career development courses.

9. The Quality Improvement Study should be continued. During the next phase emphasis should be placed on integrating the TOE with the Basis of Issue Plan (BOIP) system.

SECTION IX

RECOMMENDATIONS

1. That a letter be forwarded to DA recommending:
 - a. That a simplified system for submitting recommendations for improvement of the TOE system or specific TOE directly to USACDC be approved.
 - b. That AR 611-101, 111, and 201 and the MOS tape produced by PERSINSCOM be revised to reflect all approved position titles.
 - c. That the standard personnel remarks shown on pages 4-6 of Appendix M be approved for use in all TOE and MTOE products.
 - d. That the changes to AR 310-31 shown at Appendix M be incorporated into a change to the regulation.
 - e. That republication of Section II and III of recap tables on an annual basis, and republication of Section I, II and III of component tables after 25% of TOE has been changed or after five changes have been published be approved.
2. That during Phase III of the study, effort be concentrated on:
 - a. Developing a better interface between TOE and BOIP.
 - b. Developing audit procedures that will identify BOIP and MOS changes that have not been applied to the MOS file.
 - c. Developing procedures for updating BOIP.

d. Identifying procedural changes that will give the group commanders greater flexibility in carrying out their role in the development of organizational phase products.

e. Developing a methodology for automating the supporting narrative.

f. Improving the quality of published TOE and TOE changes.

g. Identifying additional automated modules that can be added to the TOE system now under development.

h. Investigating the feasibility of automating the organization chart and radio net diagram so they can be transmitted by AUTODIN.

i. Investigating the feasibility of including Section I of the TOE on the TOE microfilm file.

j. Investigating the phasing of TOE development and the feasibility of bringing it into closer synchronization with the force development cycle.

k. Developing procedures for implementing a simplified suggestion system.

l. Considering the feasibility of using short title nomenclature in Section III of the TOE.

STUDY PLAN
APPENDIX A
QUALITY IMPROVEMENT OF THE
TOE SYSTEM (U)
PHASE II

DISPOSITION FORM

For use of this form, see AR 140-15, the proponent agency is The Adjutant General's Office.

REFERENCE OR OFFICE SYMBOL

CDCDO-OE

SUBJECT

Combat Developments Study Plans; Quality Improvement of the TOE System, Phase II

TO Chief, O&E Division

FROM Director, Organization

DATE 27 JUL 1971

CMT 1

LTC Stocks/saf/42111

1. REFERENCES

a. Report of Study, Directorate of Organization, 30 Jun 71, subj: Quality Improvement of the TOE System (U), Phase I.

b. DF, CDCDO, 2 Feb 71, subj: Combat Developments Study Plan: Quality Improvements of the TOE System (Appendix A to Reference a).

2. PURPOSE:

a. To provide a continuation and refinement of procedures initiated in Phase I.

b. To examine specific areas identified but not treated in Phase I and to make recommendations for improving the quality of TOE.

3. Terms of Reference:

a. Problem: Data automation has not been fully utilized in the development and processing of new or revised TOE. Most of the development process is still done manually. Procedures require submission of recommendations through channels. This is cumbersome to the point of discouraging individual submission of recommendations. A lack of standardization has developed in titles, abbreviations and remarks used in TOE.

b. Impact of Problem: The TOE system is not used as the basis for current authorization because of its inability to respond rapidly enough to many factors which impact in authorization that cause change.

c. Environment: Within the past year, three different and new types of TOE (H-Series, ASTRO, TRICAP) have been developed. TOE are normally developed for worldwide application. These TOE were developed with constraints and orientations of a specific nature.

d. Study Objectives: The objectives of Phase II of this study are:

(1) To refine edit programs and procedures for a single change system.

(2) To examine methods to determine a manner for automation of supporting narrative.

(3) To develop an effective costing system.

A-1

27 JUL 1971

CDCDO-OR

SUBJECT: Combat Developments Study Plans; Quality Improvement of the TOE System, Phase II

(4) To recommend modifications that will result in standardization of position titles, abbreviations and remarks used in TOE.

(5) To conduct an analysis of methods to liberalize procedures under which individuals and unit commanders may submit recommended changes to TOE.

(6) To bring the TOE system and VTAADS into closer synchronization.

(7) To isolate and categorize ten major areas in the TOE system in most need of improvement.

(8) To review current procedures used in preparation and processing for publication of new or revised TOE and make recommendation for automation of status reporting.

(9) To review the current TOE format to determine changes necessary to make the TOE more responsive to the requirements of the Army staff and the user in the field. Particular attention will be given to:

(a) Including in the TOE selected information currently submitted as supporting documents.

(b) Reducing the content of Section I.

(10) To develop a TOE Improvement reporting system.

a. Scope.

(1) Develop and submit for automation edit programs based on existing regulations pertaining to personnel and equipment authorizations.

(2) Conduct and monitor a test of procedures for a single change system.

(3) Aggregate and compare available systems for costing organizations to determine the best system for use in cost comparisons of TOE; or determine proper variations where applicable.

(4) Analyze current titles, abbreviations and remarks contained in TOE to determine what modifications are required to standardize these factors in the TOE.

A-2

27 JUL 1971

CDCDO-OE

SUBJECT: Combat Developments Study Plans; Quality Improvement of the TOE System, Phase II

(5) Recommend modifications to regulations to liberalize procedures under which recommended changes may be submitted.

(6) Compare the TOE system and VTAADS to determine what modifications are required to closely synchronize the two systems.

(7) Aggregate and summarize available research findings to identify ten major areas in the TOE system in most need of improvement.

(8) Develop and submit for automation a procedure for monitoring preparation and processing status of new or revised TOE.

f. Constraints:

(1) To cause the least turbulence when implemented.

(2) TOE improvements should be realized without major reprogramming effort.

(3) The analysis of ADP equipment shall be limited to existing hardware.

g. Assumptions. DA will approve recommendations contained in Phase I Study Report.

h. Essential Elements of Analysis (EEA).

(1) What portion of supporting narrative is amenable to automation? How can supporting narrative be modified to facilitate automation?

(2) What cost data should be included in order that cost comparison can be made in TOE Personnel Allowances? Is grade/wage cost only a valid comparison? Should training for MOS be included in cost data?

(3) Are remarks necessary to explain the allowance for equipment? What types of remarks would be retrieved by ADP means if they were standardized?

(4) Are duty position titles that describe a specific function essential or will duty position titles with broad generic application suffice?

(5) Will use of standard abbreviations and truncated titles provide meaningful description? Should AR 310-50 be expanded to include abbreviations to aid in TOE position descriptions?

27 JUL 1971

CDCDO-OE

SUBJECT: Combat Developments Study Plans; Quality Improvement of the TOE System, Phase II

(6) Are present procedures for submission of recommended changes to TOE overly restrictive?

(7) What portions of the TOE system and VTAADS can be changed to bring the two systems into closer synchronization?

(8) What are the ten major areas in the TOE system in most need of improvement?

(9) How can preparation and processing schedule and status reporting be automated?

i. Methodology: Phase II of study will employ qualitative and quantitative techniques to meet the objectives and answer the EEA. Subjective judgement and experimental test techniques will be used in analytic phase.

j. Alternatives: If necessary will be developed during the course of the study if different from those stated in reference b.

k. Measures of Effectiveness:

(1) Quantitative measures relating to time required to process TOE.

(2) Development of effective system, or identification of existing system, for application where no system is now used (e.g. cost analysis).

(3) Use of automation to perform tasks with added speed and creditability previously accomplished manually.

(4) Increase in number and acceptability of recommended changes to TOE submitted by individuals and unit commanders.

l. Criterion of Choice: A comparison of resource savings and capability improvements which can be realized through implementation of the proposed changes against resources and capabilities of the current system.

m. Related Studies.

(1) USACDC Management Information System ACN 16979

(2) USACDCSG TOE Symposium Sept 1969

A-4

27 JUL 78

CDCDO-OE

SUBJECT: Combat Developments Study Plans; Quality Improvement of the TOE System,
Phase II

(3) USACDC Reserve Component Study ACN 18007

4. Support and Resource Requirements

a. Support Requirements. Phase II of the study will be conducted as an in-house effort of the Directorate of Organization. The level of effort to be expended for the conduct of the study is estimated to be 8 man-months over a 5-month period. Not included are contributions by members of the Directorate, depending on area of expertise/interest, on a part time basis as the requirement may arise.

b. Resource Requirements: Estimated costs within CDC to implement new change system proposed in Phase I and to be refined in Phase II is as follows.

(1) Programming costs = 2.1 man years \$22,922

(2) No change in machine/hours/month now used to process TOE.

c. Data Requirements. Data for this phase of study will be collected by soliciting comments and recommendations from ACSFOR, DA, Army Security Agency, TOE proponents within CDC and from major overseas commands through CDC liaison officers.

5. Administration

a. Study Schedule.

(1) Initial IPR, Phase II - 14 Sept

(2) 2nd IPR, Phase II - 5 Oct

(3) A detailed schedule is contained at Incl 1.

b. Study Outline: See Inclosure 2.

c. Study Project Officer: LTC W. O. Knowles. In his absence LTC H. W. Stocks.

6. Correlation: TOE Automation Study (ACN 16979) and Phase I, Quality Improvement of TOE Systems, Phase I of same ACN (ACN 18610).

2 Incl
as


RIFE

A-5

27 JUL 1971

PHASE II STUDY OUTLINE

1. STUDY OBJECTIVES

The objectives of Phase II of this study are:

- (a) To refine edit programs and procedures for a single change system.
- (b) To examine methods to determine a manner for automation of supporting narrative.
- (c) To develop an effective costing system.
- (d) To recommend modifications that will result in standardization of position titles, abbreviations and remarks used in TOE.
- (e) To conduct an analysis of methods to liberalize procedures under which individuals and unit commanders may submit recommended changes to TOE.
- (f) To bring the TOR and VTAADS into closer synchronization.
- (g) To isolate and categorize ten major areas in the TOR system in most need of improvement.
- (h) To review current procedures used in preparation and processing for publication of new or revised TOE and make recommendation for automation of status reporting.

2. SCOPE

- (a) Develop and submit for automation edit programs based on existing regulations pertaining to personnel and equipment authorizations.
- (b) Conduct and monitor a test of procedures for a single change system.
- (c) Aggregate and compare available systems for costing organizations to determine the best system for use in cost comparisons of TOE; or determine proper variations where applicable.
- (d) Analyze current titles, abbreviations and remarks contained in TOE to determine what modifications are required to standardize these factors in the TOE.
- (e) Recommend modifications to regulations to liberalize procedures under which recommended changes may be submitted.

27 JUL 1971

(f) Compare the TOE system and VTAADS to determine what modifications are required to closely synchronize the two systems.

(g) Aggregate and summarize available research findings to identify ten major areas in the TOE system in most need of improvement.

(h) Develop and submit for automation a procedure for monitoring preparation and processing status of new or revised TOE.

3. DATA COLLECTION AND COORDINATION REQUIREMENTS

Data for this phase of study will be collected by soliciting comments and recommendations from ACSFOR, DA, Army Security Agency, TOE proponents within CDC and from major overseas commands through CDC liaison officers.

4. STUDY SCHEDULE

See Inclosure 2.

A-7

TASK	DATE	JULY 5 12 19 26	AUGUST 2 9 16 23 30	SEPT 6 13 20 27	OCT 4 11 18 25	NOV 1 8 15 22 29	DEC 8 13 20
DATA COLLECTION		NOTE 1 & 2					
ANALYSIS							
IPR				X			
CONCLUSIONS & RECOMMENDATIONS							
INITIAL DRAFT							
2d IPR				X			
COORDINATION							
PREP FINAL DRAFT							
REVIEW BY CDC							
STAFF POSITION BRIEFING					X	X	
DECISION BRIEFING						X	
FINAL PREP PRINTING ETC.							
SUBMISSION TO DA						X	

NOTE 1 - 2 Jul Phase I Report Submitted to DA ACSFOR, Expected Data Reply Unknown.

NOTE 2 - 17 Jun Ltrs dispatched to ACSFOR, ASA, Overseas LNO and TOE Proponents Requesting Comments and Recommendations for Areas to be Addressed During Phase II, Replies Due 15 Aug.

DA ACTION ON PHASE I
RECOMMENDATIONS

APPENDIX B

QUALITY IMPROVEMENT OF THE
TOE SYSTEM (U)

PHASE II

FOR OT OM TO (2 Jul 71) 1st Ind
SUBJECT: Quality Improvement of the TOE System

Mr. Lader/psw/78084

HQ, DA, Office, Assistant Chief of Staff for Force Development,
Washington, D. C. 20310 17 AUG 1971

TO: Commanding General, United States Army Combat Developments Command,
ATTN: CDGDO-OE, Fort Belvoir, Virginia 22060

1. The following position is taken with regard to the recommendations contained in Phase I of subject USACDC study:

a. The concept of a single change system is approved. Implementation of the concept should not disrupt the functioning of other interfacing or dependent systems. Accordingly, CDC operational improvements which can be started immediately should not be deferred for six months pending the results of this ongoing study or other continuing effort to improve the TOE system. (Reference is made to Phase II of subject study.)

b. Interfacing ADP systems requirements for TOE data (files and/or tapes) should be worked out by mutual agreement between CDC and those DA agencies and major commands which need TOE data so as to meet the demands of those systems.

c. The requirement to conduct area of interest review of selected TOE changes will continue in effect in accordance with AR 310-31. CONARC has indicated that area of interest review of minor changes should not be discontinued until CDC edit programs are established; that Center Team level review of minor TOE changes be directed by CDC in their TOE processing regulations; and, that correspondence forwarding draft plan changes to HQ USACDC for approval reflect that Center Team coordination has been effected by the proponent agency. USAMC has not replied to date regarding their position. However, DA has no objection to rescinding area of interest review of TOE changes by HQ USAMC and HQ CONARC provided mutual agreements of understanding are worked out between HQ USACDC and these commands.

d. The feasibility and desirability of changing DA directed personnel actions (MOS revisions) from a quarterly basis is presently under study. The study will not be completed for approximately 60 days. This delay in a DA decision should not alter the CDC effort to institute the Phase I proposed improvements as well as develop other improvements.

B-1

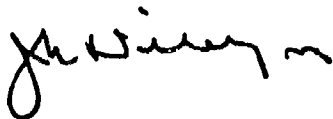
4101060

FOR OT OM TO (2 Jul 71) 1st Ind
SUBJECT: Quality Improvement of the TOE System

2. The attached inclosure 2 contains other detailed comments and recommendations regarding Phase I of subject study.

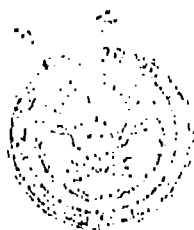
FOR THE ASSISTANT CHIEF OF STAFF FOR FORCE DEVELOPMENT:

2 Incl
Added 1 incl
2. DA Comments re Phase I
of Study


JOHN F. WILHELMY, JR.
Colonel, GS
Deputy Director, Organization,
Unit Training & Readiness, OACSFOR

B-2

4101060



DEPARTMENT OF THE ARMY
HEADQUARTERS
UNITED STATES ARMY COMBAT DEVELOPMENTS COMMAND
FORT BELVOIR, VIRGINIA 22060

2 JUL 1971

CDCDO-DE

SUBJECT: Quality Improvement of the TOE System

Assistant Chief of Staff
for Force Development
Department of the Army
ATTN: FOR CT ON TO
Washington, D. C. 20310

1. Reference conference at this headquarters 1 December 1970 concerning the TOE system. As a result of this conference CDC agreed to:
 - a. Conduct a study directed toward improving the quality of the TOE system.
 - b. Accelerate the publication of Consolidated Change Table 300-48.
2. Consolidated Change Table 300-48 which incorporates all DA directed changes effective through 1 October 1971 is now being processed for dispatch to TAG for publication. This action will be completed by 1 July 1971.
3. A study group was formed within CDC's Organization Directorate in February 1971 to review all aspects of TOE development. As a preliminary to Phase I of the study, CCNARC and the major overseas commands were queried through the CDC Liaison officers on their use of TOE and MTOE. Phase I of this two-phase study has been completed. A copy of the study report is at Inclosure 1.
4. During Phase I, methods were examined for:
 - a. Expanding the use of the consolidated change table for updating the TOE data bank and published tables.

B-3

CDCDO-OE

SUBJECT: Quality Improvement of the TOE System

b. Reducing the scope and time required for area of interest (AOI) review.

c. Expanding the use of ADP edit programs.

d. Automating the application of changes.

e. Increasing the use of automatic data processing in TOE development.

5. The study indicates that a revised TOE change system is required if CDC is to improve its responsiveness to DA requirements. The current change system is revealed to be redundant, inefficient and uneconomical. A single change system which updates the data bank on a continuing basis and published tables on a semi-annual basis is indicated. The attached study report outlines such a change system.

6. Currently, all scheduled changes are submitted to COMARC and AOC for area of interest review (AOI). Such detailed and extensive review for new and revised TOE is understandable, but review of most changes by Center Tech is sufficient. Elimination of AOI review for most changes is indicated. As an exception to policy we recommend that only changes with major personnel and equipment implications receive Area of Interest review.

7. Current CDC edit programs provide a base for expanding the use of ADP edit of TOE. Programs based on Army regulations which specify personnel and equipment allowances for TOE can be added to existing edit program.

8. The TOE data file must be updated on a continuing basis. Automated application of changes can be made possible by establishing a transaction file. On a monthly basis changes from the transaction file could be made available to DA for use in its computations. The combination of such a file with a single change system could assist in bringing the TOE system and VTAADS into closer synchronization.

9. Phase I of the study revealed areas in the TOE preparation and processing cycle where increased use of automatic data processing is indicated. These areas will be considered further in Phase II and include status reporting, costing and narrative/justification development.

B-4

CDCDO-OE

SUBJECT: Quality Improvement of the TOE System

10. Phase II of the study which is expected to be completed by 31 December 1971 will include:

- a. Refining edit programs and procedures for a single change system.
- b. Automation of supporting narrative.
- c. Development of an effective costing system.
- d. Standardizing position titles, abbreviations and remarks used in TOE.
- e. Liberalizing procedures under which individuals and unit commanders may submit recommended changes to TOE.
- f. Bringing the TOE system and VTAADS into closer synchronization.
- g. Identification of ten major areas in the TOE system in most need of improvement.
- h. Review of procedures used in preparation and processing for publication of new or revised TOE.

11. Conclusions:

- a. The TOE data bank and published tables are required as a base for inputting organizational data into DA Management Information System. It must be maintained on a timely basis to insure an accurate projection of requirements and to act as a driving force for the authorization system. (Study Report, Sec III, para 2).
- b. The present system for updating the TOE data bank and published tables by publication of a consolidated or scheduled TOE change is redundant and inefficient. (Study Report, Sec IV, para 5)
- c. A single change system which updates the data bank on a continuing basis and published tables on a semi-annual basis appears feasible. (Study Report Sec IV, para 6). Tests now underway with the Engineer Agency will identify any problem areas and assist in developing policy and procedures for a single change system.
- d. The current system for applying DA directed personnel (MOS and grade) changes to TOE should be changed from a quarterly to a semi-annual system. A semi-annual system is now used for LIN equipment changes. (Study Report, Sec IV, para 9).

CINCDO-OE

SUBJECT: Quality Improvement of the TOE System

e. Current edit programs can be expanded to identify personnel and equipment errors, check for application of DOI, verify MACRI computations and flag DA controlled MOS and equipment. Subsequently this program can be expanded to automatically delete obsolete, one-for-one, LIN and MOS and enter new information. (Study Report, Sec V, para 2).

f. The preparation of supporting narrative, TOE status reporting and control systems, and an effective system for costing personnel and equipment should be considered during Phase II of the study. (Study Report, Sec VI, para 1). The standardization of position titles and remarks used in the TOE and MTOE systems should also be established as a Phase II objective.

g. Area of interest review of changes is redundant, uneconomical, and time consuming. (Study Report, Sec VII, para 2).

12. Phase I recommendations:

a. That a single change system be established within six months after DA approval of the concept.

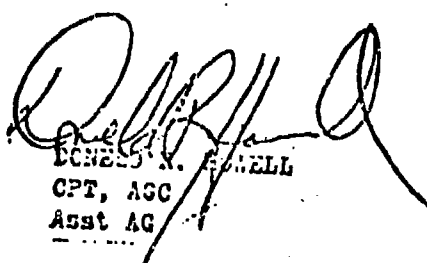
b. That the requirement to conduct area of interest review of all TOE changes be rescinded, and that only changes with major personnel and equipment implications receive area of interest review.

c. That the effective dates for DA directed personnel actions be changed from a quarterly to a semi-annual basis.

13. ACN 18610 applies.

FOR THE COMMANDER:

1 Incl (8 copies)
Study Report, Ph I


KENNETH R. FARRELL
CPT, AGC
Asst AG

LETTER TO USAMSSA ON
REVISION OF TOE PROCESSING PROGRAMS

APPENDIX C

QUALITY IMPROVEMENT OF THE
TOE SYSTEM (U)

PHASE II



DEPARTMENT OF THE ARMY
HEADQUARTERS
UNITED STATES ARMY COMBAT DEVELOPMENTS COMMAND
FORT BELVOIR, VIRGINIA 22060

CDCDO-OE

7 October 1971

SUBJECT: Quality Improvement of the TOE System

Commanding Officer
US Army Management Systems Support Agency
ATTN: USAMSSA-SD (SRB)
Washington, D. C. 20310

1. Reference: HQ USACDC Ltr, CDCDO-OE, 2 Jul 71, subject: Quality Improvement of the TOE System, with 1st Indorsement HQ, DA, FOR OT GM TO, 17 Aug 71, subject as above. (See inclosure 1)
2. DA per 1st Indorsement to referenced letter approved the concept of a single change system for TOE and requested that this proposal and any other improvements to the TOE processing system be implemented as soon as possible. Modification of the ADP files and TOE processing programs to incorporate a single change system represents a major programming effort. Therefore this appears to be an opportune time to add other improvements that will reduce ADP storage media requirements, decrease machine processing time, and increase the efficiency of the TOE processing system. The system redesign will incorporate many of the changes being recommended by Computer Science Corporation in their design of a Management Information System for CDC. It is estimated that the ADP storage requirements for example will be reduced by 15% when the changes outlined at inclosure 2 are implemented.
3. In addition to the program changes outlined in paragraphs 1-6 of inclosure 2, program changes that accommodate the augmentation column will also be incorporated into the TOE processing programs. The current TOE format provides a column for reflecting personnel and equipment augmentations. This column, however, has never been used for its intended purpose because of the space requirements in the storage files to accommodate this data. Current programs do not provide the capability to use this column. In Jan 1970 when DA directed the development of H series TOE with specific strength ceilings, those positions that exceeded these ceilings were placed manually in augmentation paragraphs because the ADP programs used to process TOE did not provide the capability to use the augmentation column.

C-1

CDCDO-OE

SUBJECT: Quality Improvement of the TOE System

4. The target date for having the new programs operational is 1 Jul 1972. Sixty days notification will be provided if circumstances force a change in current plans. Copies of this letter are also being provided elements of the DA staff and major Army commands that use the TOE data files to insure that affected headquarters are aware of these changes. Questions on this proposal should be directed to LTC Knowles, Fort Belvoir, Va., Extension 43328/42111. Action personnel within this headquarters are prepared to meet with your representatives to discuss the changes outlined above in more detail if desired. System design of these program changes is now underway.

FOR THE COMMANDER:

2 Incl
as

DISTRIBUTION:
See attached list.

C.A.B.t.
C. A. BARTOSAVAGE
Major, AGC
Asst AG

C-2

CDCDO-OE

SUBJECT: Quality Improvement of the TOE System

Copy Furnished:

DACS-CM

DAGE

DAVN

DAFO-OTO-T

DALO

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DASG-DDF-O

USCONARC (ATIT-RD-DD)

USAMC PP-PS

CO, EARC, Ft Belvoir, Va.

CO, MIDA, Letter Kenny Army Depot (Mr. Fidler)

CC, PERSINCOM

USACDCOML

USACDCPALS

USACDCINGSG

USACDCONFORS

USACDCSAG

USACDCARMA

USACDCFAA

USACDCAVNA

USACDCIA

USACDCJAA

USACDCMA

USACDCMSA

USACDCPASA

USACDCSA

USACDCTA

USACDCADA

USACDCCEA

USACDCINTELA

USACDCMPA

USACDCSOA

USACDCCHA

LnO, USAREUR

LnO, USARPAC

LnO, USARV

LnO, EUSA

C-3

TOE Program and System Changes

1. Single Change System - The A, B, and C and/or E records will contain an indicator to denote an unpublished change which is being held in suspense until the change is to be published (changes to be published semiannually).
2. Eliminate strength levels and equipment levels from the "A" and "B" records. Inclusion of these data elements in these records serves no useful purpose since the same data is available from personnel and equipment detail records. Removal of these data elements from the "A" record will make space available to accommodate an internal control system for processing of TOE within CDC.
3. Eliminate the "D" record inasmuch as its content and purpose is redundant to that of the "B" record. The redesign will enable the "B" record to perform all functions currently being accomplished by the "D" record.
4. Eliminate the "G" record. Although they are currently part of the TOE files, the "G" records serve no useful purpose and should be excluded.
5. Eliminate the Section code and Transaction code (columns 11 and 118 of all records) from the TOE master files. Physical existence of these data elements in the master file serves no useful purpose.
6. Modify the files so that only the latest and valid preceding accumulative changes appear on the published file. All previous changes will be maintained on the historical file so they may be stored off-line but available for recall when required.
7. Augmentation columns - Both TOE forms (DA Forms 2949 and 2950) contain a column which was intended for reporting augmentations. The redesign of ADP programs will make it possible to show augmentation levels in these columns and at the same time retain the capability to use augmentation paragraphs in TOE as required.

USAMSSA CONCURRENCE IN
REVISED PROGRAM FORMAT

APPENDIX D

QUALITY IMPROVEMENT OF THE
TOE SYSTEM (U)

PHASE II



DEPARTMENT OF THE ARMY
U.S. ARMY MANAGEMENT SYSTEMS SUPPORT AGENCY
WASHINGTON, D.C. 20310

24 NOV 1971

DACS-AMZ

SUBJECT: Quality Improvement of the TOE System

Commanding General
Headquarters
US Army Combat Developments Command
Fort Belvoir, Virginia 22060

1. Reference:

a. HQ USACDC Ltr, CDCDO-OE, 7 October 1971, subject: Quality Improvement of the TOE System.

b. Staff level meeting held at CDC with representatives from CDC, ACSFOR and USAMSSA on 19 October 1971.

c. Workers level meeting held at CDC with representatives from USAMSSA on 18 November 1971.

2. The TOE System changes outlined in reference 1a and discussed with representatives from your headquarters are compatible with USAMSSA's needs. Request that this Agency be kept informed of the detail file layouts for the revised system and provided with new data element definitions as they are developed.

SIGNED

WALTER C. TERRY
Director, USAMSSA

D-1

NARRATIVE DESCRIPTION OF
SINGLE CHANGE SYSTEM

APPENDIX E

QUALITY IMPROVEMENT OF THE
TOE SYSTEM (U)

PHASE II

SINGLE CHANGE SYSTEM

Effective 1 July 1972 the TOE data bank and published tables will be updated under the procedures outlined below. Under these procedures all approved changes will be entered on a transaction (suspense) file on a continuing basis. The file will be cut off at the end of six months and numbered changes sent to TAG for publication.

1. The Data Processing Field Office (DPFO) will produce extract copies of Sections II and III of all G, H and current T series TOE. The extract copies will incorporate all currently published TOE changes and will be produced on two part paper.

2. One set of the Section II and III worksheets will be retained as a master reference set by the Policy and Processing Branch, Organization and Equipment Division, Organization Directorate. The other set will be broken out by TOE series and sent to the applicable action desk within the Organization and Equipment Division of Organization Directorate.

3. As MOS changes, new SB 700-20 tapes, authority to apply Basis of Issue Plans, etc., are identified, retrievals will be requested from DPFO. Error listings resulting from personnel and equipment edits of the published file will also be provided. The retrievals, edits, etc., will be broken out to the applicable action desks where appropriate changes will be annotated, on the retrieval sheet. The annotated retrieval sheets will be returned to DPFO through the Policy and Processing (P&P) Branch. P&P Branch will record the applicable changes on their reference set, and then forward the retrieval worksheets to DPFO for cutting of punch cards and entry of the changes into the transaction (suspense) file.

LETTER TO CONARC ON
REDUCTION OF AOI REVIEW

APPENDIX F

QUALITY IMPROVEMENT OF THE
TOE SYSTEM (U)

PHASE II

ATIT-RD-CD (23 Feb 72) 1st Ind
SUBJECT: Area of Interest Review of TOR Changes

AUTOVON 680-3051

HQ, CONARC, Ft Monroe, VA 23351 1 MAR 1972

TO: Commanding General, US Army Combat Developments Command, ATTN:
CDCDO-OE

This headquarters concurs with recommendations in basic correspondence.

FOR THE COMMANDER:

wd all incl

Fritz
F. M. FRITZ
1LT, AGC
Asst AG

F-1

CDCDO-OE

SUBJECT: Area of Interest Review of TOE Changes

4. In view of the above it is recommended that effective 1 July 1972 area of interest review of TOE changes by HQ, CONARC, be limited to those that:

a. Result in a change in the units operational capability or concept of operation.

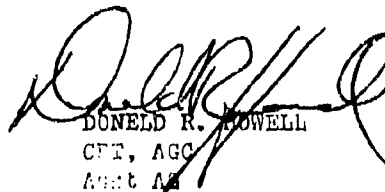
b. Introduce new MOS & major items of equipment.

5. Any questions on this proposal should be directed to LTC Wallace O. Knowles, Fort Belvoir, Virginia, Extension 43328 or 42111.

FOR THE COMMANDER:

2 Incl

as


DONALD R. HOWELL
CPT, AGC
Asst AG

F-3

LETTER TO USAMC ON REDUCTION
OF AOI REVIEW

APPENDIX G
QUALITY IMPROVEMENT OF THE
TOE SYSTEM (U)

PHASE II

CDCDO-OR

29 FEB 1972

SUBJECT: Area of Interest Review of TOE Actions

Commanding General
US Army Materiel Command
ATTN: RP-PS
Washington, D. C.

1. References:

a. AR 310-31, Management System for TOE.

b. CDCDO-OR Ltr, HQ USACDC, 2 Jul 71, subject: Quality Improvement of the TOE System, with 1st Ind, FOR OT-OM-TO, HQDA, 17 Aug 71.

2. Paragraph 1-22 of reference 1a requires USAC to conduct area of interest (AOI) review of all draft plan TOE and TOE changes and post publication review of all TOE.

3. Paragraph 12b of reference 1b (Incl 1) transmitted to DA a recommendation that the requirement to conduct area of interest review of all TOE changes be rescinded and that only changes with major personnel and equipment implications receive area of interest review. By 1st indorsement DA approved the recommendation in principle provided mutual agreements could be worked out.

4. Edit programs with the capabilities shown at Inclosure 2 are now in use or under development at HQ, CDC and will be operational by 1 July 72. It is felt that these programs negate the need for review of minor TOE changes. AOI review would be continued for new and revised TOE, and TOE changes that:

a. Result in a change in the units operational capability or concept of operation.

b. Introduce new MOS and major items of equipment.

5. CDC requires that all changes proposed by TOE proponents within CDC be coordinated with the appropriate COMARC and AIC center team representatives. Further, that correspondence forwarding proposed changes to CDC HQ include a statement that the change has been coordinated with the appropriate center team representatives.

G-1

CDCDO-GF

SUBJECT: Area of Interest Review of TOE Actions

6. Elimination of AOI review of minor TOE changes will reduce the cost and time required to incorporate this type of change into applicable TOE. AOI review of major changes and post publication review of all changes appears to provide sufficient screening of TOE. After 1 July 72 errors identified during these reviews may be corrected for administrative errors by entering the desired information into a transaction file of unpublished changes in the TOE data bank, and publication of a hard copy correction in the next semi-annual change to the TOE.

7. In view of the above request your concurrence in limiting AOI review as indicated in Para 4. Any questions on this proposal should be directed to LTC Wallace O. Knowles, Fort Belvoir, Virginia, extension 43328/42111.

FOR THE COMMANDER:

2 Incl
as

Info Cy Furn:
EABC


DONALD W. HOWELL
CPT, AGC
Asst AG

G-2

SURVEY OF TOE USERS

APPENDIX H

**QUALITY IMPROVEMENT OF THE
TOE SYSTEM (U)**

PHASE II



DEPARTMENT OF THE ARMY
HEADQUARTERS
UNITED STATES ARMY COMBAT DEVELOPMENTS COMMAND
FORT BELVOIR, VIRGINIA 22060

21 JAN 1971

CDCDO-P

Major Philip S. Andrews
U. S. Army Combat Developments Command
Liaison Office
G3, Eighth U. S. Army, Korea
APO San Francisco 96301

Dear Major Andrews:

Our thanks for your contribution to Phase I of the TOE Quality Improvement Study which is nearing completion. Recommendations resulting from this phase will be submitted to DA by 1 July 1971. You will be furnished a copy of our report.

We are now planning Phase II of the study, which we expect to complete o/a 1 December 1971. This phase will include an examination of methods for standardizing position titles, abbreviations and remarks; bringing the TOE and MTOE systems into closer synchronization; amending regulations to allow and encourage easier submission of recommended changes to the TOE system; and improving the overall usefulness of the TOE.

We also hope to identify the ten areas in TOE which are in most need of improvement, or stated another way, what are the ten most glaring deficiencies in the current system? Inclosure 1 lists some suggested "improvement" questions to which we would appreciate receiving comments. However, please do not feel bound solely by these questions. We are really after positive suggestions from the field on any area which will improve the TOE program.

Current procedures for submitting recommended changes to the TOE are prescribed in AR 310-31, and in Section I of the TOE. We feel that some changes are long overdue here. In this connection we would appreciate comments which address the following aspects of this area. Other comments on the problem are also encouraged.

a. HQ, CDC receives very few recommended changes from the field. Apparently the individual soldier is not aware that he can suggest changes to the TOE. What can and should CDC do to publicize this fact? What methods are considered most suitable for eliciting suggestions?

H-1

21 JUN 1971

CDCDO-P

Major Philip S. Andrews

b. Current procedures specify that recommended changes be submitted through command channels. If these procedures were revised to permit submission of recommended changes directly to the TOE proponent, would this encourage greater participation by the soldier and unit in the field?

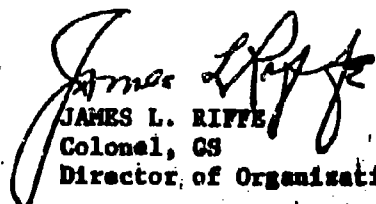
c. Presently, there is no prescribed format for recommending changes to the TOE. Attached at Inclosure 2 is a suggested form for submitting changes. What are your suggestions for improving this form? Should it be used as one method of submitting changes? Should this form be a part of the TOE or perhaps adopted as a standard DA form in the implementation of a worldwide TOE improvement reporting system?

Current procedures for the development and use of basis of distribution and equipment remarks are prescribed in AR 310-31. Unlike the personnel remarks codes in Section II of the TOE, where an attempt has been made to assign the same meaning in each application, equipment remarks have not been standardized. Inclosure 3 provides a more detailed discussion of subject together with some questions concerning this problem.

We would appreciate your assistance in obtaining the information outlined herein by 15 August 1971. Replies should be forwarded to HQ, USACDC, ATTN: CDCDO-OE, Fort Belvoir, Virginia 22060. Any questions or areas requiring clarification may be referred to LTC Louis P. Bayard or LTC Harold W. Stocks, AUTUVON 35-42111 or 43757.

Thanks again.

Sincerely,


JAMES L. RIFFE
Colonel, GS
Director of Organization

3 Incl
as

H-2

SUGGESTED IMPROVEMENT QUESTIONS

1. Section I of the TOE provides a list of applicable AR's, CTA's, DA Pam's and SB's pertaining to equipment allowances reflected in Section III. Is this list of references of value to the TOE user or must he consult other sources to obtain information needed on equipment?
2. In Section II of the TOE, remarks are used to identify additional duty positions such as education officers, drivers, radio operators, etc. Are such remarks of use to the unit commander, or to the staff officer?
3. Position job titles are not currently standardized. The terms chief, supervisor, team leader, etc., are often used to describe the same type function. Would use of a standard title such as platoon or section sergeant cause the TOE user any particular difficulty?
4. Mission essential expendable items are not presently included in TOE. The user must refer to the appropriate CTA to obtain the quantities of mission essential expendable items. Would inclusion of these items in the TOE be of value to the user? If so, how?
5. Recap tables are not currently updated. Would the publication of an updated copy periodically be of significant value to the field?
6. Personnel and equipment allowances are now published in separate sections. Would changing the TOE format by listing the personnel and equipment side-by-side, or one above the other, in each paragraph be of value? If so, how?
7. Personnel authorizations are now listed by officer, warrant officer, non-commissioned officer, then by grade, then in alphabetical order according to job description. Would another type of listing be of any assistance?
8. One of the recommendations of Phase I of the study is to combine consolidated changes and individual changes into a single change system with changes being published on a semi-annual basis. If this procedure is adopted, will this cause any favorable/unfavorable impact on units in the field?
9. Augmentation paragraphs are used in the H series TOE to reflect wartime requirements which cannot be included in the main body of the TOE due to DA constraints. Request comments or recommendations on the format used for these augmentations. Would use of the augmentation column instead of augmentation paragraphs expedite the development of detailed MTOE documents?
10. Draft plan TOE include certain supporting documents which justify the personnel and equipment contained in the TOE; for example, vehicle justification and loading plans, type radio net and type wire net diagrams, and fuel consumption data, etc. Is this information of possible value to the user in the field? Should it be a standard part of the TOE?

Incl 1

H-3

DATE:

TO: Commanding General
US Army Combat Developments Command
ATTN: CDCDO-OE
Fort Belvoir, Virginia 22060

FROM:

Reference: TOE NO. & SERIES _____ DATE PUBLISHED _____ TITLE _____

I recommend that the Table of Organization and Equipment indicated above be changed as follows:

*PARAGRAPH NUMBER _____ PARA TITLE _____

*LINE NUMBER (PERSONNEL) _____ DESCRIPTION _____

*LINE ITEM NUMBER (EQUIPMENT) _____ DESCRIPTION _____

RECOMMENDED CHANGE: _____

FOLD HERE

REASON: _____

*If unknown, you may provide other identifying information, e.g. Para No. _____
Line No. _____ Line Item _____

This form is pre-addressed.
Fold so address shows and staple.

Incl 2

II-4

EQUIPMENT REMARKS QUESTIONS

1. Paragraph 2-50a, AR 310-31 states in part: "a. Equipment remarks are intended to guide unit commanders in distribution of equipment and to restrict the issue of equipment."

a. Do these remarks as now used in Section III of the TOE satisfy these objectives? If so, how?

b. Are these remarks useful to other than unit commanders, such as force planners, logisticians, and developers of MTOE under The Army Authorization Documents System (TAADS)? If so, how?

c. Are the remarks necessary to explain or justify the allowance for the equipment or amplify to the readers the basis of allocation? Explain.

d. What would be the impact if the remarks were deleted entirely and the unit commander or force developer allowed to allocate the equipment as the mission dictates?

e. Should the remarks be limited only to identify major PEMA components used with assemblages and sets of equipment, i.e., those listed in AR 725-1?

2. Paragraph 2-50d, and figure 2-1, AR 310-31 authorizes a wide range of numerical codes for equipment remarks.

a. Would a greater degree of standardization or limitation of the use of a variety of codes, similar to that applied in Section II of the TOE, make these remarks more useful and meaningful?

b. Would standardization assist the TOE or MTOE developer?

3. Some commands use the TOE published file in ADP form.

a. For these users would there be a need to retrieve data contained in the equipment remarks?

b. Would greater standardization of the remarks aid in retrieval?

c. What types of remarks would be retrieved by ADP means if they were standardized?

U-5

INCL 3

RESULTS OF SURVEY OF TOE USERS

APPENDIX I

QUALITY IMPROVEMENT OF THE
TOE SYSTEM (U)

PHASE II

TOE Improvement Questions

1. Is publication reference list in Section I of TOE of value? Should it be retained?

Answer. List is of value and should be retained.

2. Are the remarks in Section II identifying additional duty positions useful to the commander and staff officer?

Answer. These remarks are of immense value especially for the inexperienced commander and staff officer.

3. Position titles are not currently standardized, would the use of standard titles cause the TOE user any difficulty?

Answer. Use of standardized position titles appears to be feasible, no particular problems foreseen if standard titles were adopted.

4. Would the inclusion of mission essential expendable items in TOE be of value to the user?

Answer. Information of little value and would compound the problem of property accountability.

5. Would the publication of updated recap tables be of value to the user?

Answer. The value of these tables to commanders and higher level staff would be increased considerably if they were updated.

6. Would a change in the TOE format by listing the personnel and equipment sections side-by-side, or one above the other, be of value to the user?

Answer. No. present format is acceptable.

7. Personnel authorizations are now listed by officer, W.O., NCO, EM, then by grade, and then in alphabetical order based on position title. Would another format be more useful?

Answer. No, present format has proven to be very useful.

8. One of the recommendations of Phase I of the Quality Improvement Study was to establish a single change system with hard copy changes published semi-annually. Do you anticipate any problems with such a system?

Answer. No. None anticipated, should reduce the turbulence caused by the frequency of DA directed changes we have today.

9. Augmentation paragraphs are being used in the H-series TOE to reflect wartime requirements which cannot be included in the active TOE due to DA constraints. Would use of the augmentation column in Section II and III of the TOE be preferable to the augmentation paragraph which is identified with a separate SRC?

Answer. Use of the augmentation column is preferred.

10. Draft plan TOE include a supporting narrative which includes justification for personnel and equipment, vehicles, power and fuel computations, radio net diagrams, and loading plans. Would it be of value to include such information in the TOE?

Answer. Such information while being of some value to the inexperienced staff and commander, would make the TOE document too cumbersome. Such information is better provided in Field Manuals and in school course supplements.

Equipment Remarks Questions

1. Equipment remarks are intended to guide unit commanders in distribution of equipment and to restrict its issue.

a. Do the remarks as now used in Section III of the TOE satisfy this requirement?

Answer. Yes, they assist the inexperienced commander and staff officer in matching secondary items and major items of equipment.

b. Are the remarks useful to other than unit commanders?

Answer. Yes, higher level staff use them to assist in force planning and preparation of MTOE.

c. Are the remarks necessary to explain or justify the allowance for the equipment or to explain the basis of allocation?

Answer. They are necessary for explaining the equipment allowance and for relating it to the major end item. Not necessary for justifying the equipment, but it does simplify the task.

d. What would be the impact if the remarks were deleted entirely?

Answer. Would make the job of inexperienced commander and staff officer more difficult.

e. Should the remarks be used to identify only major PEMA components of sets or assemblages?

Answer. No. relating other major items, use equipment is intended for, etc., is also needed.

2. AR 310-31 authorizes a wide range of numerical codes for equipment remarks.

a. Would greater standardization make the remarks more meaningful?

Answer. Yes, and would enhance the ability to retrieve by automated means.

b. Would standardization assist the TOE and MTOE developer?

Answer. Yes, especially in bringing the TOE and MTOE into closer synchronization.

3. Some commands use the TOE published in ADP form.

a. For these users is there a need to retrieve data by automated means?

Answer. Yes, but difficult at present due to lack of standardization.

b. Would greater standardization of equipment remarks aid retrieval?

Answer. Yes, only through greater standardization can retrieval of equipment remarks by ADP means be expanded.

c. What type of remarks would be retrieved by ADP means if they were standardized?

Answer. All

SURVEY OF ENLISTED

POSITION TITLES

APPENDIX J

QUALITY IMPROVEMENT OF THE

TOE SYSTEM (U)

PHASE II

<u>SRC Code</u>	<u>TOTAL</u> <u>Nr. Enlisted</u> <u>Titles Used</u>	<u>Nr. Non-std</u> <u>Titles</u>	<u>%</u> <u>Standard</u> <u>Titles</u>
01127H100	61	7	87.00
01137H100	60	8	84.60
01167H100	69	4	93.85
05146H000	105	11	86.50
05156H000	107	3	97.12
06037H000	50	5	88.89
06186H000	91	9	89.03
06216H000	89	10	87.35
06367H000	40	6	82.36
06396H000	68	9	84.75
06436H100	75	8	88.00
07036H000	76	7	89.86
07046H010	78	7	90.14
0716H000	74	6	91.18
10007H000	88	14	80.00
17058H000	59	9	82.00
17108H000	50	6	86.37
29036H000	78	7	90.14
29042H110	79	8	88.75
29086H100	117	4	96.40
29097H100	108	11	88.66
55084H000	51	5	89.13

	<u>AVERAGE</u>		
<u>Nr. TOE</u>	<u>Av Nr</u> <u>En/Titles/TOE</u>	<u>Av Nr</u> <u>Non-std Titles/TOE</u>	<u>Av % std</u> <u>Titles/TOE</u>
22	76	7	90.79
<u>Total Nr</u> <u>TOE</u>	<u>Total Enlisted</u> <u>Titles</u>	<u>Total non-std</u> <u>Titles</u>	<u>% Std</u> <u>Titles</u>
22	1673	164	90.20

Standardization of Position Titles

1. On pages J3 and J4 is a comparison of how position titles look today in TOE 6-37H and how they would look if they were standardized. Clarity of meaning has not been hindered by standardizing these titles.
2. The position code column shown after the title is keyed to one of the titles shown on the applicable page of the MOS book. Extracts of these pages are shown on pages J6 - J21. On page J5 is listed "position codes" for titles that appear in many MOS. Through use of a single numeric code for such positions we can insure standardization as well as expedite retrieval based on a common position code.
3. If such a system is approved by DA, CDC will have to identify appropriate Officer and Warrant Officer titles to DA for standardization and for incorporation on the MOS tape produced by PERSINSCOM.

SECTION II: PERSONNEL ALLOWANCES

LINE	UNIT	DESCRIPTION	CHANGE NUMBER	GRADE	AGE	I	STRENGTH LEVELS					SQUADS		
							1	2	3	4	5	1	2	3
6		SAC 76037H000												
		FA BTRY 159MM SP ARMD CAV SUSA												
		BATTERY HEADQUARTERS												
01		BATTERY COMMANDER		CPT	51193	FA	1	1	1			1	11	
02		FIRST SERGEANT		E-8	13250	NC	1	1	1			1		
03		MESS STENDARD		E-7	94840	NC	1	1	1			1		
04		WAGON SERGEANT		E-6	63040	NC	1	1	1			1		
05		SUPPLY SERGEANT		E-6	76740	NC	1	1	1			1		
06		FIRST COOK		E-6	94820		1	1	1			1		
07		BATTERY CLERK		E-5	71120		1	1	1					
08		FIRST COOK		E-5	74820		2	2	2					
09		SH TRACK VEHICLE MECH		E-5	63020		1	1	1					
10		ARMORER		E-4	76730		1	1	1				01	06
11		COOK		E-4	94820		1	1	1				01	
12		EQUIP RECORDS CLERK		E-4	71120		1	1	1					
13		GP POWER GENR OP/MECH		E-5	52820		1	1	1					
14		REPAIR PARTS SP		E-4	76520		1	1	1					
15		TRK VEHICLE MECH		E-4	63020		4	4	4			1		
16		RADIO TELEPHONE OP		E-3	13A10		1	1	1				01	
17		TRACK VEH MECH HELPER		E-3	63A10		1	1					01	
		PARA TOTAL					21	21	20			7		
2		BATTERY DETAIL												
01		RECON-SURVEY OFFICER		LT	01183	FA	1	1	1					
02		CHIEF OF DETAIL		E-7	82040	NC	1	1	1			1		
03		COMMUNICATIONS CHIEF		E-5	31640	NC	1	1	1			1		
04		WIRE TEAM CHIEF		E-5	36840	NC	1	1	1					
05		SURVEY COMPUTER		E-5	82020		2	2	2					
06		FACAC/RADIO MECHANIC		E-4	31830		1	1	1					
07		INSTRUMENT OPERATOR		E-4	82020		1	1	1					
08		SR FLD SWITCHBOARD OP		E-4	36820		1	1	1					
09		SENIOR FIELD WIREMAN		E-4	36820		1	1	1					
10		SURVEY RECORDER		E-4	82020		1	1	1					
11		FIELD SWITCHBOARD OP		E-3	36820		1	1						
12		FIELD WIREMAN		E-3	36820		3	2	2				41	
13		RADIO TELEPHONE OP		E-3	82010		2	1	1				41	
14		ROOMMAN-TAPEMAN		E-3	82010		2	1	1					
		PARA TOTAL					19	16	15			2		
15		FINING BATTERY HQ												
01		EXECUTIVE OFFICER		LT	51193	FA	1	1	1			1		
02		ASSY EXECUTIVE OFF		LT	01183	FA	1	1	1					

SECTION II: PERSONNEL ALLOWANCES

UNIT	ORG	DESCRIPTION	POS CODE	GRADE	NUMBER	GRADE	NO	STRENGTH LEVELS					REMARKS		
								1	2	3	4	5	6	7	8
01		BEC 060376000													
		BTRY HQ													
	01	BTRY CDR	2	CPT	51193	7A		1	1	1			1	11	
	02	1ST SGT	6	E6	13250	MC		1	1	1			1		
	03	MESS STEWARD	7	E7	94820	MC		1	1	1			1		
	04	MTR SGT	6	E6	63C40	MC		1	1	1			1		
	05	SUP SGT	9	E6	76Y40	MC		1	1	1			1		
	06	1ST COOK	8	E6	94820			1	1	1			1		
	07	BTRY CLR	4	E5	71N20			1	1	1					
	08	1ST COOK	8	E5	94820			2	2	2					
	09	SR T VEH MECH	8	E5	63C20			1	1	1					
	10	ARMORER	C	E4	76Y30			1	1	1			01	06	
	11	COOK	A	E4	94820			1	1	1			01		
	12	EQUIP REC CLK	B	E4	71720			1	1	1					
	13	GP PWR GEN OP/MECH	A	E4	52B20			1	1	1					
	14	REP PTS SPEC	A	E4	76820			1	1	1					
	15	T VEH MECH	A	E4	63C20			4	4	4			1		
	16	RTO	A	E3	13A10			1	1	1			01		
	17	T VEH MECH HLPR	B	E3	63A10			1	1				01		
		PARA TOTAL						21	21	20			7		
02		BTRY DTL													
	01	RECON-SURV OFF	4	LT	01103	FA		1	1	1					
	02	C OF DTL	I	E7	82C40	MC		1	1	1			1		
	03	COMM C	A	E5	31G40	MC		1	1	1			1		
	04	WIRE TM C	H	E5	36K40	MC		1	1	1					
	05	SURV CMPT	E	E5	82C20			2	2	2					
	06	PADAC/RDO HQ TM	C	E4	31B30			1	1	1					
	07	INST OP	D	E4	82C20			1	1	1					
	08	SR FLD SUBD OP	D	E4	36K20			1	1	1					
	09	SR FLD WPMN	B	E4	36K20			1	1	1					
	10	SURV RCDR	C	E4	82C20			1	1	1					
	11	FLD SUBD OP	C	E3	36K20			1	1						
	12	FLD WPMN	A	E3	36K20			3	2	2			41		
	13	RTO	A	E3	82C10			2	1	1			61		
	14	ROTHMAN - TAPEMAN	B	E3	82C10			2	1	1					
		PARA TOTAL						19	16	15			2		
03		FIRING BTRY													
	01	XO	3	LT	51193	FA		1	1	1			1		
	02	ASST XO	3	LT	01193	A		1	1	1					

<u>CODE</u>	<u>POSITION</u>
1	Bn Cmdr
2	Btry Cmdr
3	XO
4	Plt Ldr
5	SGM
6	1st Sgt
7	Mess Steward
8	Mtr Sgt
9	Sup Sgt
0	Clk

J 5

24 July 1970.

STANDARDS OF GRADE AUTHORIZATION

Pos Code	Line	Duty Position	Code	Grade
A	1	See paragraph 5b (1)	13A10	E-3
B	2	Security Guard	13A10	E-3
C	3	Ammunition Handler	13A10	E-3
D	4	Cannoneer	13A10	E-3
E		loader		
F	5	Armored Vehicle Driver	13A1U	E-4
G		CP carrier driver		
H	6	Ammunition Specialist	13A10	E-4
I		ammunition agent		
J	7	Artillery Recorder	13A10	E-4
K	8	Assembler	13A10	E-4
L	9	Heavy Truck Driver	13A10	E-4
M	10	Prime Mover Driver	13A10	E-4
N		cargo carrier driver		

Title in Abbreviated Form

B Scty Gd
 C Ammo Hdlr
 D Cannoneer
 E Loader
 F Armd Veh Dvr
 G CP Carr Dvr
 H Ammo Spec
 I Ammo Agt
 J Arty Rcdr
 K Asblr
 L Hv Trk Dvr
 M Prime Mover Dvr
 N Cgo Carr Dvr
 * O Mtr Carriage Dvr

*Not included in list of titles but used in TOE.

able to interpret and apply pertinent modification work orders. Must be able to perform and supervise all authorized organizational maintenance disassemblies and adjustments for field artillery weapons. Must know safety precautions to be observed in maintaining, operating and testing field artillery weapons and turrets. Must be able to operate and adjust field artillery panoramic sights. Must be able to prepare and maintain maintenance forms and records.

Code 13B40. Must be qualified as Field Artillery Crewman (13B20 or 13B30). Must be able to supervise firing battery, gun or howitzer, ammunition, or security section. Must know operation and care of aiming circle. Must be able to establish battery perimeter defense employing individual and crew-served weapons. Must be able to establish and control local air defensive system. Must know misfire procedures. Must be able to supervise requisition, receipt, and storage of field artillery conventional ammunition. Must be able to identify enemy aircraft. Must know fundamental techniques and procedures of battery administration, supply, mess, and maintenance activities. Must know fundamental elements of support organization for supply, maintenance, communications, and administration. Must know Army Equipment Records System applicable to operator and crew maintenance procedures. Must be able to lay battery parallel. Must know fundamentals of field artillery fire direction and survey.

Physical Requirements

Color vision to analyze maps, to identify ammunition, and use camouflage. Night vision to perform night fire missions. Eye-hand coordination, and manual and finger dexterity to use tools and measuring devices. Near vision to work on small parts and to read scales on precision instruments. Auditory acuity to detect

unusual operating noises indicating defective operating components.

Mental Requirements

Aptitude Area, AE. Reasoning and verbal ability to absorb, comprehend, use, and convey tactical and technical data involved in field artillery combat operations. Number facility to operate fire control instruments. Spatial relations and mechanical ability to understand function, operation and maintenance of field artillery weapons. Emotional control and decisiveness to respond to fact changing situations involving personal hazards.

★Special Requirements

Prior to assignment to duties in nuclear weapon duty positions as defined in AR 50-3 must—

1. Have final SECRET security clearance based on a completed National Agency Check (NAC).

2. Meet personnel security standards for nuclear capable organizations and activities as set forth in AR 50-3.

3. Meet selection, assignment, and retention criteria for personnel as outlined in AR 611-15.

Additional Skill Identifier

ASI	System
M5.....	Nuclear Operations (8" How)
M6.....	Nuclear Operations (155-mm How)
R6.....	Redeye Operations
★R3.....	Nuclear Security

Related Civilian Occupations

DOT classification

None.

Federal Civil Service classification

None.

STANDARDS OF GRADE AUTHORIZATION

Pos Code	Line	Duty position	Code	Grade	Explanatory notes
A	1	Assistant Gunner	13B20	E-4	
	2	Redeye Gunner	13B20	E-4	
C	3	Artillery Mechanic	13B30	E-4	In field artillery battery or comparable unit for organizational maintenance.
D		artillery turret mechanic			
E	4	Assistant Section Chief	13B40	E-4	In ammunition or security section of field artillery units.

19 February 1970

C 15, AR 611-201

Pos
Code

F	♂	Gunner	13H40	E-5	In field artillery battery as the principal assistant to chief of section.
G	♂	Section Chief	13B40	E-5	In security section of gun or howitzer battery or comparable unit; or in ammunition section of field artillery headquarters, headquarters and service battery or service battery.
H	♂	Redeye Team Chief	13B40	E-5	In air defense team.
I	♂	Chief of Section	13B40	E-6	In firing section of gun or howitzer battery or comparable unit; or in ammunition section of firing battery; or air defense section.
J		section chief			
K		section leader			
L	♂	Ammunition Supply Sergeant	13B40	E-6	In ammunition train or headquarters, headquarters and service battery, or comparable unit.
M	★♂♂	Chief of Firing Battery	13B40	E-7	As principal NCO in firing battery of field artillery cannon unit, detachment or comparable organization.
N		detachment sergeant			

A Asst Gnr
 B Redeye Gnr
 C Arty Mech
 D Arty Trt Mech
 E Asst Sec C
 F Gnr
 G Sec C
 H Redeye Tm C
 I C of Sec
 J Sec C
 K Sec Ldr
 L Ammo Sup Sgt
 M C of Firing Btry
 N Det Sgt

J8

80.1

instruct computer personnel in recording missions, orders, computation of fire commands and corrections, and announcing data to batteries. Must be able to supervise operation and operator maintenance of section equipment, vehicles, and individual and crew-served weapons.

Physical Requirements

Color vision, depth perception, and night vision as member of forward observation party. Near vision to read maps. Auditory acuity to receive oral reports and respond to commands. Clear speech to deliver commands to unit personnel.

Mental Requirements

Aptitude Area AE. (If aptitude area AE is not available, use aptitude area CO.) Reasoning and verbal ability to absorb, comprehend and convey tactical and technical data involved in field artillery forward observation and liaison with infantry and armor units. Number facility to compute quickly and accurately firing data and to convert firing data into fire commands. Spatial relations ability to utilize topographic maps and firing charts in forward observation and in fire direction. High degree of emotional control to facilitate quick thought and action in fast changing situations involving personal hazards. Memory to recall instructions of superiors, and status and disposition of correspondence and reports.

riors, and status and disposition of correspondence and reports.

Special Requirements

Must possess a SECRET clearance granted in accordance with AR 664-5. If incumbent to a command and control duty position as defined in AR 611-15, must meet selection, assignment and retention criteria outlined in AR 611-15. Must be a US Citizen.

★Special Qualifications Identifier

Use of SQI "X" for use with this MOS to identify TACFIRE qualification/requirements is shown in Section V of this regulation.

Additional Skill Identifier

ASI *Synsam*
L9 Unattended Ground Sensor

Related Civilian Occupations

DOT classification *Code*
Draftsman, Map 017.281
Draftsman, Topographical 017.281

Federal Civil Service classification *Code*
Cartographical Aid GS 1371
Cartography GS 1370
Engineering Aid and Technician GS 802

STANDARDS OF GRADE AUTHORIZATION

Pos Code	Line	Duty Position	Code	Grade	Explanatory notes
A	1	Operations Specialist.....	13E20	E-4	
B	2	Liaison Specialist Intelligence Specialist.....	13E20	E-4	
C	3	Chart Operator.....	13E20	E-4	
D	4	Chronograph Operator.....	13E20	E-4	
E	5	Fire Direction Computer.....	13E20	E-5	
F	6	Senior Chronograph Operator.....	13E20	E-5	
G	7	Reconnaissance Sergeant.....	13E40	E-5	In forward observer or comparable section.
H	8	Liaison Sergeant.....	13E40	E-6	In liaison of comparable section.
I	9	Assistant Chief Fire Direction Computer.....	13E40	E-6	In cannon fire direction activity to assist chief fire direction computer.
J	10	Chief Fire Direction Computer.....	13E40	E-7	As principal NCO of cannon fire direction activity.
K	11	Assistant Intelligence Sergeant.....	13E40	E-7	In intelligence section of artillery battalion or in other artillery headquarters of comparable or higher level to assist Intelligence Sergeant.
L	12	Assistant Operations Sergeant.....	13E40	E-7	In operations and fire direction section of artillery battalion headquarters or in other artillery headquarters of comparable or higher level to assist Operations Sergeant.

[Next page is 89]

84 A Op Spec
B Ln Spec Intel Spec
C Chart Op
D Chronograph Op
E FD Cmpt
F Sr Chronograph Op

G Recon Sgt
H Ln Sgt
I Asst C FD Cmpt
J C FD Cmpt
K Asst Intel Sgt
J9 L Asst Op Sgt

AGO 2140A

22 October 1971

Mental Requirements

Aptitude Area EL. Requires mechanical ability to perform duties involved in installation, adjustment, and maintenance of unit communications and electronic equipment. Requires verbal ability to read and apply technical material pertaining to maintenance of unit communications and electronic equipment. Requires reasoning ability to determine causes of equipment malfunction and extent of maintenance required.

Special Requirements

Must possess a SECRET clearance granted in accordance with AR 604-5.

★Special Qualifications Identifier

Use of SQI "X" for use with skill level 3 of this MOS to identify TACTIRE qualifications/requirements is shown in Section V of this regulation.

Related Civilian Occupations**DOT classification****Code**

Radio Mechanic..... 823.281

Radio Repairman..... 720.281

Electronic Technician..... 003.181

Federal Civil Service classification**Code**Radio Equipment Installing and
Repairing..... WG 2608**STANDARDS OF GRADE AUTHORIZATION**

Pos Code	Line	Duty Position	Code	Grade	No. of positions authorized*										Explanatory Notes
					1	2	3	4	5	6	7	8	9	10	
A	A	Field Radio Mechanic.....	31B20	E-4	1	1	2	2	3	3	4	4	5	5	Grades of additional positions will be authorized in same pattern.
B	B	Senior Field Radio Mechanic.....	31B20	E-5		1	1	2	2	3	3	4	4	5	
					4	5									
C	C	FADAC Mechanic.....	31B30	E-4	1	1	2	2	3	3	4	4	5	5	
D	D	Senior FADAC Mechanic.....	31B30	E-5		1	1	2	2	3	3	4	4	5	
					4	5									

* Blank spaces in this column indicate not applicable.

- A Fld Rdo Mech
- B Sr Fld Rdo Mech
- C FADAC Mech
- D Sr FADAC mech

STANDARDS OF GRADE AUTHORIZATION

Pos Code	Line	Duty position	Code	Grade	Explanatory notes
A	1	Communications Chief.....	31G40	E 5	In unit of company or battery level for supervision of communications system comprising two or following three functions: radio, wire, message center.
A	2	Communications Chief.....	31G40	E 6	In unit of battalion level and above, for supervision of 10 or fewer personnel engaged in operation of communications system.
A	3	Communications Chief.....	31G40	E 7	In unit of battalion level or above, for supervision of 20 to 29 personnel engaged in operation of communications system.
B	4	Communications Chief.....	31G50	E 8	In unit of battalion level or above for supervision of 30 or more personnel engaged in operation of communications system.
B	5	Communications Chief.....	31G50	E-8	In communications unit at brigade or group level.

A Comm C
A Comm C
A Comm C
B Comm C
B Comm C

STANDARDS OF GRADE AUTHORIZATION

Pos Code	Duty position	Code	Grade	Number of positions authorized*										Explanatory notes
				1	2	3	4	5	6	7	8	9	10	
Field Wire														
A	✓ Field Wireman	36K20	E-3	1	2	2	3	4	4	5	0	6	7	Grades of additional positions will be authorized in same pattern.
B	✓ Senior Field Wireman	36K20	E-4			1	1	1	2	2	2	3	3	
				3	3	4								
Field Telephone Exchange Operations														
C	✓ Field Switchboard Operator	36K20	E-3	1	2	2	3	4	4	5	6	6	7	Grades of additional positions will be authorized in same pattern except in units authorized only 1 or 2 switchboard operators, 1 grade E-4, Senior Switchboard Operator is authorized.
D	✓ Senior Field Switchboard Operator	36K20	E-4			1	1	1	2	2	2	3	3	
				3	3	4								
Message Processing														
E	✓ Message Clerk	36K20	E-3	1	2	2	3	4	4	5	6	6	7	Grades of additional positions will be authorized in same pattern except in units authorized 1 or 2 clerks, 1 grade E-4 is authorized.
F	✓ Senior Message Clerk	36K20	E-4			1	1	1	2	2	2	3	3	
				3	3	4								
G	✓ Messenger	36K20	E-3											For each wire team or crew comprising 4 or more field wiremen. In units comprising 2 or more wire crews totaling 8 or more field wiremen.
H	✓ Wire Team Chief	36K40	E-5											
I	✓ Wire Foreman	36K40	E-6											

* Blank spaces in this column indicate not applicable.

A Flt Wrman
 B Sr Fld Wrman
 C Fld Swbd Op
 D Sr Fld Swbd Op
 E Mag Clk
 F Sr Msg Clk
 G Msgr
 H Wire Tm C
 I Wire Fman

30 June 1971

STANDARDS OF GRADE AUTHORIZATION

Pos Code	Line	Duty position	Code	Grade	Number of positions authorized*										Explanatory notes
					1	2	3	4	5	6	7	8	9	10	
A	1	Power Generation Equipment Helper.	52A10	E 3		1	1	2	2	3	3	4	4	5	Grades of additional positions will be authorized in same pattern.
	2	General Purpose Power Generator Operator/ Mechanic.	52B20	E 4	1	1	2	2	3	3	4	4	5	5	
B	3	Multipurpose Power Generator Operator/ Mechanic.	52B30	E 4	1	2	2	3	4	4	5	6	6	7	
C	4	Senior Multipurpose Power Generator Operator/Mechanic.	52B30	E 5			1	1	1	2	2	2	3	3	
D	5	Power Generation Equipment Repair Assistant.	52B30	E 4											See MOS for Power Generation Equipment Repairman (52D) for standards of grade authorization.

*Blank spaces in this column indicate not applicable.

- A GP Pwr Genr Op/Mech
- B Mpps Pwr Genr Op/Mech
- C Sr Mpps Pwr Genr Op/Mech
- D Pwr Genr Equip Rep Asst

STANDARDS OF GRADE AUTHORIZATION

Pos Code	Line	Duty position	Code	Grade	Explanatory notes
A	1	Wheel Vehicle Mechanic Helper.....	63A10	E-3	See MOS for Wheel Vehicle Mechanic (63B) for standards of grade authorization.
B	2	Track Vehicle Mechanic Helper.....	63A10	E-3	See MOS for Track Vehicle Mechanic (63C) for standards of grade authorization.
C	3	Fuel and Electrical Systems Repair Helper.	63A10	E-3	See MOS for Fuel and Electrical Systems Repairman (63G) for standards of grade authorization.
D	4	Automotive Repair Helper.....	63A10	E-3	See MOS for Automotive Repairman (63H) for standards of grade authorization.
E	5	Quartermaster Light Equipment Repair Helper.	63A10	E-3	See MOS for Quartermaster Light Equipment Repairman (63J) for standards of grade authorization.
F	6	Quartermaster Heavy Equipment Repair Helper.	63A10	E-3	See MOS for Quartermaster Heavy Equipment Repairman (63K) for standards of grade authorization.

A W Veh Mech Hlpr
 B T Veh Mech Hlpr
 C Fuel Elec Sys Rep Hlpr
 D Autmu Rep Hlpr
 E QM Lt Equip Rep Hlpr
 F QM Hv Equip Rep Hlpr

Special Requirements

Must possess Army vehicle operator's permit for equipment operated.

Related Civilian Occupations

DOT classification	Code
Automobile Mechanic.....	620.281
Diesel Mechanic.....	625.281
Mechanic, Industrial Truck.....	620.281
Truck Mechanic.....	620.281

Additional Skill Identifier

Federal Civil Service classification	Code
Automotive Equipment Repairing.....	WB 5823
Combat Vehicle Inspecting.....	WB 5808
Combat Vehicle Repairing.....	WB 5807

ASI System
R4..... All materials handling equipment

STANDARDS OF GRADE AUTHORIZATION

Pos Code	Line	Duty position	Code	Grade	Number of positions authorized*										Explanatory notes
					1	2	3	4	5	6	7	8	9	10	
A B	1	Track Vehicle Mechanic Helper.	63A10	E-3			1	1	1	1	2	2	2	2	Grades of additional positions will be authorized in same pattern.
	2	Track Vehicle Mechanic..	63C20	E-4	1	2	2	2	3	4	4	4	5	6	
	3	Senior Track Vehicle Mechanic.	63C20	E-5				1	1	1	1	2	2	2	
					4	4	3	5							
C	4	Wrecker Operator.....	63C20	E-4											SUPERVISORY POSITIONS RESPONSIBLE FOR MAINTENANCE ON BOTH WHEEL AND TRACK VEHICLES ARE APPROPRIATE FOR CLASSIFICATION IN THE MOS FOR TRACK VEHICLES (MOS 63C). For supervision of 2 to 4 maintenance personnel. For supervision of 5 to 8 maintenance personnel. For supervision of 9 or more maintenance personnel or in headquarters of flexible battalion or higher level unit for supervision or organizational motor maintenance in assigned or attached units. In battalion, comparable or higher level headquarters for supervision of 12 or more maintenance personnel.
B	5	Motor Sergeant.....	63C40	E-5											
B	6	Motor Sergeant.....	63C40	E-6											
B	7	Motor Sergeant.....	63C40	E-7											
B	8	Motor Sergeant.....	63C40	E-8											

*Blank spaces in this column indicate not applicable.

A TVeh Mech
B Sr TVeh Mach
C Wkr Op
B Mtr Sgt
B Mtr Sgt
B Mtr Sgt
B Mtr Sgt

J 15

650

AGO 5397A

***EQUIPMENT MAINTENANCE CLERK MOS 71T**

Duties

Initiates and maintains equipment and maintenance records. Posts changes to equipment records and maintenance schedules. Prepares reports pertaining to equipment and maintenance. Maintains equipment data files. Advises and assists operator and maintenance personnel in proper documentation of equipment records and processing of maintenance data. Advises supervisor of problem areas concerning maintenance data collection and recommends improvement in unit procedures.

Skills and Knowledge

Code 71T20. Must be qualified as Clerk Typist (71B10). Must know policies and procedures governing maintenance data collection and record-keeping and report preparation as they apply to a particular organizational assignment. Must have general knowledge of purpose and scope of Army maintenance system, Army integrated equipment record and maintenance management system, and Army sup-

ply system as these apply at organizational level.

Physical Requirements

Near vision to read, examine, extract, file, and prepare maintenance data records and reports. Eye-hand coordination and finger and manual dexterities to operate office equipment, post entries to records, and prepare correspondence and reports.

Mental Requirements

Aptitude Area CL. Reasoning and verbal ability to comprehend, interpret, and apply contents of regulations and to understand instruction of supervisors. Perceptual speed and numbers facility to review records and reports for accuracy and completeness. Dependability and attentiveness in preparing maintenance and equipment reports.

Related Civilian Occupation

DOT classification	Code
Clerk, General	209.588
Clerk, General Office	219.388
Clerk-Typist	209.588
Federal Civil Service classification	Code
General Clerical and Administrative	GS 301

STANDARDS OF GRADE AUTHORIZATION

Pos
Code

Title	Duty position	Code	Grade	Number of positions authorized										Explanatory notes
				1	2	3	4	5	6	7	8	9	10	
1	Assistant Equipment Maintenance Clerk.	71B10	E-3	1	1	2	2	3	3	4	4	5		Grades of additional positions will be authorized in same pattern.
A	* Equipment Maintenance Clerk.	71T20	E-4	1	1	2	2	3	3	4	4	5	5	
				4	3									

A Equip Maint Clk
* B Equip Rec Clk

*Not included in list of titles but used in TOE.

19 February 1970

erating procedures pertaining to automotive repair parts supply activities.

Physical Requirements

Requires color discrimination and good near vision to identify color-coded parts, inspect supply documents, and to peruse and review correspondence, orders, and similar material. Requires auditory acuity to receive oral reports of personnel and to respond to commands in field. Requires clear speech to deliver commands to unit personnel. Requires extensive walking and standing to inspect, store and issue repair parts. Requires ability to grasp, lift, and carry repair parts of various weights and dimensions.

Mental Requirements

Aptitude Area CL. Requires verbal and reasoning abilities to read and understand communications received, publications, parts lists, catalog and other references pertaining to repair parts and supply regulations, make appropriate disposition, or initiate necessary action. Requires memory to recall instructions of superior, and status and disposition of correspondence and reports. Requires emotional stability and good judgment to fulfill command respon-

sibilities. Requires mechanical aptitude to understand function and operation of parts within major components. Requires number facility and perceptual speed to scan and review documents, accounts, and other related supply records.

Special Requirements

The duties described in this MOS specification may be performed with the assistance of automatic data processing facilities which provide listings and other documentation containing quantitative, qualitative, and other information in the form of current and former status and comparative analysis of stock.

★Additional Skill Identifier

ASI System
To Depot and/or Inventory Control Center

Related Civilian Occupations

DOT classification	Code
Inventory Clerk	223.388
Parts Man	920.887
Parts Storckeeper	289.358
Salvage Man II	638.281

Federal Civil Service classification	Code
Supply Item Identification	GS 2031

STANDARDS OF GRADE AUTHORIZATION

Pos Code	Line	Duty position	Code	Grade	Number of positions authorized*										Explanatory notes
					1	2	3	4	5	6	7	8	9	10	
A	A	Repair Parts Specialist	76S20	E-4	1	2	2	3	4	4	5	6	6	7	Grades of additional positions will be authorized in same pattern.
B	A	Senior Parts Specialist	76S20	E-5			1	1	1	2	2	2	3	3	
					4	4	5								
	A	Repair Parts Clerk	76A10	E-3											For supervision of 10 or fewer personnel. For supervision of 11 to 28 personnel. For supervision of 29 or more personnel.
C	A	Salvage Inspector	76S20	E-5											
D	A	Repair Parts Supervisor	76S40	E-5											
D	B	Repair Parts Supervisor	76S40	E-6											
D	A	Repair Parts Supervisor	76S40	E-7											

*Blank space in this column indicate not applicable.

A Rep Pts Spec
B Sr Pts Spec
C Salv Insp
D Rep Pts Supv
D Rep Pts Supv
876 D Rep Pts Supv

Mental Requirements

Aptitude Area CL. Requires mechanical aptitude to perform organizational maintenance on small arms. Requires perceptual speed to scan and check supply forms and property record books for complete and appropriate entries. Requires number facility to compute and verify amounts of supplies requisitioned, issued, and received, and perform bookkeeping and accounting procedures.

Special Requirements

The duties described in this MOS specification may be performed with the assistance of automatic data processing facilities which provide listings

and other documentation containing quantitative, qualitative, and other information in the form of current and former status and comparative analysis of stock.

Related Civilian Occupations

<i>DOT classification</i>	<i>Code</i>
Armorer.....	632.281
Material Clerk.....	223.387
Stock Clerk.....	223.387
Stock Control Clerk.....	223.387
Stock Control Supervisor.....	223.138

<i>Federal Civil Service classification</i>	<i>Code</i>
Property and Supply Clerk.....	GS 2040
Stockkeeper.....	GS 2030
Supply Catalog Clerk.....	GS 2050

STANDARDS OF GRADE AUTHORIZATION

Pos Code	Line	Duty position	Code	Grade	Number of positions authorized*										Explanatory notes
					1	2	3	4	5	6	7	8	9	10	
A A A	1	Supply Clerk.....	76A10	E-3		1	1	2	2	2	3	3	4	4	When E4 Armor position is authorized in unit supply section, first position authorized under this pattern will be E-3 Unit and Organization Supply Clerk.
	2	Supply Specialist.....	76Y20	E-4	1	1	2	2	2	3	3	4	4	4	
	3	Supply Specialist.....	76Y20	E-5					1	1	1	1	1	2	
					4	3	4	3	5						
B	1	Artificer.....	76Y30	E-4											In company or battery.
C		armorers.													
9	1	Supply Sergeant.....	76Y40	E-5											In detachment for performance of unit supply functions.
9	2	Supply Sergeant.....	76Y40	E-6											In company, battery, or comparable unit.
9	3	Supply Sergeant.....	76Y40	E-7											As principal NCO of battalion S4 section.

*Blank spaces in this column indicate not applicable.

- A Sup Spec
- A Sup Spec
- B Artificer
- C Armorer
- 9 Sup Sgt
- 9 Sup Sgt
- 9 Sup Sgt

select starting station and determine methods of obtaining starting azimuth and assuming coordinates and height. Must know purpose of and techniques used by the survey information center and must be able to supervise its operation. Must know elements of artillery survey plan. Must know effect of survey operations on artillery fire. Must know requirements of the Army equipment record system. Must be able to supervise organizational maintenance on authorized equipment. Must know procedures for replenishment of spare parts. Must know survey organization, equipment, requirements, capabilities, and limitations in all types of artillery units. Must be able to supervise employment of artillery survey elements in all types of artillery units.

Physical Requirements

Requires night vision to perform night survey operations. Requires good near vision to prepare and review, reports, orders, and similar

material. Requires color discrimination for analysis of topographic maps. Requires auditory acuity to receive oral reports of personnel and respond to command in the field. Requires clear speech to deliver commands to unit personnel.

Mental Requirements

Aptitude Area GT. Requires reading and vocabulary aptitude to comprehend and convey tactical and technical data involved in artillery survey operations. Requires pattern analysis aptitude to plan and execute artillery survey. Requires a high aptitude for arithmetic reasoning to perform survey computations.

Related Civilian Occupations

<i>DOT classification</i>	<i>Code</i>
Surveyor	018.188
<i>Federal Civil Service classification</i>	<i>Code</i>
Cartographic Aid	GS 137
Cartography	GS 1870
Engineering Air and Technician	GS 802

STANDARDS OF GRADE AUTHORIZATION

Pos Code	Line	Duty position	Code	Grade	Explanatory notes
A	1	See paragraph 5b (1)	82C10	E-3	
B	2	Rodman Tapeman	82C10	E-3	
C	3	Survey Recorder	82C20	E-4	
D	4	Instrument Operator	82C20	E-4	
E	5	Survey Computer	82C20	E-5	
F	6	Survey Specialist	82C20	E-5	
G	7	Chief of Party	82C40	E-6	As principal NCO in survey party.
H	8	Surveyor	82C40	E-6	At artillery battalion, group, or comparable levels.
I	9	Chief of Detail	82C40	E-7	As principal NCO in artillery battery detail.
J	10	Chief Surveyor	82C40	E-7	As principal NCO in artillery survey section or platoon.
J	11	Chief Surveyor	82C40	E-8	In survey information center of artillery target acquisition battalion or similar or higher level unit.

B Rodman Taperman
 C Surv Rcdr
 D Inst Op
 E Surv Cmpt
 F Surv Spec
 G C of Pty
 H Surveyor
 I C of Dtl
 J C Surveyor
 J C Surveyor

FOOD SERVICE 94

FOOD SERVICE APPRENTICE

MOS 94A

Duties

Assists cooks, bread bakers, pastry bakers, or meat cutters in field or garrison type consolidated or unit messes, central meat cutting plants, bread bakeries, and central pastry kitchens. Washes, peels, cuts, and dices fruits and vegetables. Carries fuel and fires stoves and ovens. Unloads and stores meats, bakery supplies, and other rations. Measures prescribed quantities of baking ingredients. Cleans and greases baking pans. Loads and unloads ovens. Washes dishes, pots, and pans. Operates peeling, grinding, and dish washing machines. Collects and disposes of kitchen, meat cutting, and bakery wastes. Cleans windows, sweeps and scrubs floors, and cleans and rubs down meat cutting tables and blocks. Cleans and maintains kitchen, bakery, and meat cutting tools and equipment. Portions and serves food in serving line.

Skills and Knowledges

Code 94A10. Must know Army procedures and standards for cleaning dishes, silverware, cooking utensils, floors, tables, and food service equipment. Must know how to perform first echelon maintenance on food service machinery and equipment. Must know subsistence

storage principles. Must know procedures in collecting and disposing of food wastes. Must know sanitary and safety rules and regulations pertaining to food preparation. Must know fat rendering procedures.

Physical Requirements

Requires good near vision to accurately measure prescribed quantities of baking ingredients and to inspect subsistence supplies for contamination. Requires sense of smell to detect spoilage or unsanitary conditions. Requires ability to stoop, lift, and carry, for short distances, subsistence and other loads weighing up to 200 pounds.

Mental Requirements

Aptitude Area GT. Requires mechanical aptitude to perform first echelon maintenance on food service machinery and equipment. Requires interest in food service.

Related Civilian Occupations

DOT classification	Code
Baker Apprentice	528.781
Cook Helper	529.887
Meat Cutter's Apprentice	316.884
Federal Civil Service classification	Code
Baking	WB 7402
Baking, Pastry	WB 7403
Cooking	WB 7404
Meat Cutting	WB 7407

STANDARDS OF GRADE AUTHORIZATION

Pos Code	Line	Duty position	Code	Grade	Explanatory notes
A	1	Cook's Apprentice.....	94A10	E-3	See MOS for Cook (94B) for standards of grade authorization.
B	2	Baker's Apprentice.....	94A10	E-2,	See MOS for Baker (94D) for standards of grade authorization.
C		pastry baker's apprentice		E-3	
D		bread baker's apprentice			
E	3	Meat cutter's apprentice.....	94A10	E-3	See MOS for Meat Cutter (94C) for standards of grade authorization.
F		Cook's Helper	94A10	E-3	

- A Cook's Appr
- B Baker's Appr
- C Pastry Baker's Appr
- D Bread Baker's Appr
- E Meat Cutter's Appr
- F Cook's Hlpr

J20

1031

22 October 1971

ties. Requires ability to recall instructions of superiors and disposition of correspondence and reports.

Related Civilian Occupations

DOT classification	Code
Executive Chief.....	313.168
Kitchen Supervisor.....	310.138
Manager, Industrial Cafeteria.....	319.138

Special Requirements

Award of MOSC 94B30 as a result of on-the-job training or experience, will be based upon a favorable recommendation by the Chief, Food Service Division (MOS 3420, Hospital Dietician).

Federal Civil Service classification	Code
Baking.....	WG 7402
Baking Pastry.....	WG 7403
Cooking.....	WG 7404
Food Inspecting.....	GS 1863
Meat Cutting.....	WG 7407

★STANDARDS OF GRADE AUTHORIZATION

Pos Code	Line	Duty Position	Code	Grade	*No. of positions authorized										Explanatory Notes
					1	2	3	4	5	6	7	8	9	10	
		Unit/Consolidated Mess Operation													
A	✓	Cook.....	94B20	E-4		1	1	2	2	3	3	4	4	5	Grades of additional positions will be authorized in same pattern.
B	✓	First Cook.....	94B20	E-5		1	1	2	2	3	3	4	4	5	
C	✓	Diet Cook.....	94B20	E-4		5	4								
D	✓	Senior Diet Cook shift leader.	94B30	E-5		1	1	2	2	3	3	4	4	5	
	✓	Cooks Helper	94A10	E-3		5	4								In unit, consolidated or hospital mess authorized two or more cooks.
B	✓	First Cook.....	94B20	E-6											
E	✓	Senior Diet Cook	94B30	E-6											On basis of one per mess authorized a mess steward, grade E-7. This E-6 position will be authorized before the above E-5/E-4 pattern is applied to remaining positions.
7	✓	Mess Steward.....	94B40	E-7											

* Blank spaces in this column indicate not applicable.

- A Cook
 B 1st Cook
 C Diet Cook
 D Sr Diet Cook - Shift Leader
 E 1st Cook
 F Sr Diet Cook
 10347 Mess Steward

AGO 3140A

ADDITIONAL STANDARDIZED ABBREVIATIONS

APPENDIX K

QUALITY IMPROVEMENT OF THE

TOE SYSTEM (U)

PHASE II



DEPARTMENT OF THE ARMY
HEADQUARTERS
UNITED STATES ARMY COMBAT DEVELOPMENTS COMMAND
FORT BELVOIR, VIRGINIA 22060

CDCDO-OE

20 Oct 1971

SUBJECT: Standardization of Unit and Job Titles Used in TOE

Commanding General, United States Army Combat Developments Command
Combat Systems Group, Fort Leavenworth, Kansas 66027
Commanding General, United States Army Combat Developments Command
Intelligence and Control Systems Group, Fort Belvoir, Virginia 22060
Commanding General, United States Army Combat Developments Command
Personnel and Logistics Systems Group, Fort Lee, Virginia 23801
Commanding General, United States Army Combat Developments Command
Concepts and Force Design Group, Hoffman Bldg, 2641 Eisenhower Avenue
Alexandria, Virginia 22314

1. References: Hq. USACDC ltr, CDCDO-OE, 17 Jun 71, subject: TOE Quality Improvement Study.

2. Reference 1 requested comments and recommendations on ten areas in the TOE system requiring improvement. Questionnaires addressing specific areas to be considered during Phase II of the study: Quality Improvement of the TOE System were attached to the letter as inclosures. Similar letters and questionnaires were sent to the CDC liaison officers assigned to the major Army Commands. One of the questions dealt with the standardization of job titles (Ref 1, Incl 1). The majority of the replies to this question favored standardization.

3. A review of current practices indicated that even the abbreviations used in job and unit titles are not standardized. To determine what degree of standardization of abbreviations might be achieved a machine listing of position titles used in TOE was reviewed to determine what words were used most frequently. These are listed at inclosure 1. It was found that although approved abbreviations have been published for the majority of these words, few of them are currently being used in unit or position titles.

4. Request groups and agencies review the attached list, identify suggested changes and additional words that are frequently used in unit and position titles, and submit recommendations to this headquarters by 30 November 1971. The recommendations after review by this headquarters will be submitted to TAGO for approval and for incorporation in AR 310-50, Authorized Abbreviations and Brevity Codes.

K-1

CDCDO-OE

SUBJECT: Standardization of Unit and Job Titles Used in TOE

5. Effective 1 January 1972 all Draft Plan TOE submitted to this headquarters will utilize whenever possible the standard abbreviations listed in AR 310-50 when abbreviating words in unit and position titles.

6. This action is identified by ACN 18610.

FOR THE COMMANDER



C. A. BARTOSAVAGE

Major, AGC

Asst AG

Copy Furnished: (w/incl)

USASA, Arlington Hall Station, Va
CONFORS Gp, West, Fort Leavenworth, Kansas
CO, USACDCARMA
CO, USACDCFAA
CO, USACDCAVNA
CO, USACDCIA
CO, USACDCCHA
CO, USACDCJAA
CO, USACDCMA
CMSLMUNDIV, USACDCMA, Red Stone Arsenal, Ala
CO, USACDCMSA
CO, USACDCPASA
CO, USACDCSA
CO, USACDCTA
CO, USACDCADA
CO, USACDCCBRA
CO, USACDCCEA
CO, USACDCINTELA
CO, USACDCMPA
CO, CDCSOA

K-2

Accounting - Acct
Administration - Admin

Advisor - Adv*

Airborne - Abn

Aircraft - Acft

Airmobile - Amb1

Amphibious - Amph

Ammunition - Ammo

Ambulance - Amb

Analyst - Anal

Apprentice - Appr

Artillery - Arty

Armament - Armt

Assembler - Assy

Assistant - Asst

Assistant Chief of Staff - ACofS

Assault - Aslt

Attendent - Attnd

Automotive - Autmv

Aviation - Avn

Battalion - Bn

Battery - Btry

Boatswain - Btswn*

Branch - Br

Brigade - Bde

Bridge - Brg

Calibration - Calbr

Carpenter - Cptr

Carrier - Carr

Cavalry - Cav

Chaparral - CHAP

Chemical - Cml

Chief - Ch

Clerk - Clk*

Commander - Cmdr**

Communications - Comm

Company - Co

Computer - Cmpt

Comptroller - Compt

Construction - Const

Crewman - Crmn

Cryptographer - Crypto

Custodial - Cust

Defense - Def

Delivery - Deliv

Demolition - Dml

Dental - Den

Department - Dept

Depot - Dep

Detachment - Det

Direction - Dir

Director - Dir

Disbursing - Disb

Dispatch - Dspch

Dispensary - Disp

Distribution - Distr

Division - Div

Documents - Docu

Driver - Dvr

Engineer - Engr

Enlisted - Enl

Equipment - Equip

*No standard abbreviation included in AR 310-50.

**Standard abbreviation in AR 310-50 has more than one meaning. New abbreviation will be recommended to TAGO, as indicated in this inclosure.

Escort - Esc
Exchange - Exch
Executive Officer - XO
Explosive - Explo
Facilities - Fac
Facsimile - Fax
Field - Fld
Finance - Fin
Flight - Flt
Foreman - Fman
Forklift - Flft
Forward - Fwd
Forward Observer - FO
General - Gen
Group - Gp
Guidance - Guid*
Gunner - Gnr
Harborcraft - Harcft
Headquarters - Hq
Heavy - Hvy**
Helicopter - Heli
High Voltage - HV
Highway - Hwy*
Hospital - Hosp
Illustrator - Illustr
Information - Info
Infrared - Ir
Inspector - Insp
Instructor - Instr
Intelligence - Intel
Interrogator - Intgor

Interpreter - Intpr
Laboratory - Lab
Landing - Ldg
Launcher - Lchr
Laundry - Ldry
Leader - Ldr
Letter - Ltr
Liaison - Ln
Liaison Officer - LnO
Lineman - Lmn
Logistics - Log
Locomotive - Loco
Machine - Much
Machinist - Mach
Maintenance - Maint
Manager - Mgr
Materiel - Mat
Mechanic - Mech
Medical - Med
Message - Msg
Messenger - Msgr
Meteorological - Met
Microwave - Mwave
Military - Mil
Missile - Msl
Mortar - Mort
Motor - Mtr
Movement - Mov
Multiplex - Mux
Nuclear - Nuc
Observer - Obsr

*No standard abbreviation included in AR 310-50.

**Standard abbreviation in AR 310-50 has more than one meaning. New abbreviation will be recommended to TAGO, as indicated in this inclosure.

Officer - Off
 Operations - Op
 Ordnance - Ord
 Organization - Org
 Orthopedic - Ortho
 Pathfinder - Pfdr
 Patrol - Ptl
 Petroleum - Petr1
 Personnel - Pers
 Photographer - Photo
 Photographic - Photo
 Physical - Phys
 Platoon - Plt
 Prevention - Prev
 Processing - Proc
 Programmer - Prog
 Provost Marshall - PM
 Projector - Proj*
 Radar - Rdr
 Radio - Rdo
 Recorder - Rcdr*
 Recovery - Recov
 Railway - Ry
 Reconnaissance - Recon
 Refrigerator - Refrig**
 Regiment - Regt
 Regulating - Reg
 Repair - Rpr**
 Report - Rept
 Reproduction - Repro
 Salvage - Salv
 Secretary - Secy

Section - Sec
 Self Propelled - SP
 Senior - Sr
 Sergeant - Sgt
 Services - Svc
 Signal - Sig
 Specialist - Sp
 Squad - Sqd
 Squadron - Sqdn
 Storage - Stor
 Stenographer - Steno*
 Supply - Sup
 Subsistence - Subst
 Surgeon - Surg
 Surveillance - Survl
 Survey - Surv
 Supervisor - Supv
 Systems - Sys
 Switchboard - Swbd
 Tactical - Tac
 Target - Tgt
 Team - Tm
 Telephone - Tel
 Technical - Tech
 Textile - Tex
 Tractor - Trac
 Traffic - Tfc
 Training - Ing
 Truck - Trk
 Terminal - Tml
 Topographic - Topo
 Transportation - Trans

*No standard abbreviation included in AR 310-50.

**Standard abbreviation in AR 310-50 has more than one meaning. New abbreviation will be recommended to TAGO, as indicated in this inclosure.

Utility - Util
Vehicle - Veh
Vulcan - Vul*
Warehouseman - Whsmn
Warhead - Whd
Weapons - Wpn

ADDENDUM LIST

Attendant - ATTND	Track - Tr*
Augmentation - Aug	Trailer - Tlr
Career Counselor -	Towed - T
Center - Cen	Wheeled - Wh*
Communications - Electronics - C-E	
Electronics - Elct	
Fire Control - FC	
Generator - Gen*	
Helper - Hlpr*	
Light - Lt	
Loader - Ldr*	
Multi-channel - MC*	
Observation - Obsn	
Operator - Op	
Power - Pwr*	
Radio Teletypewriter - RATT	

*No standard abbreviation included in AR 310-50.

**Standard abbreviation in AR 310-50 has more than one meaning. New abbreviation will be recommended to TAGO, as indicated in this inclosure.

K-6

CDCDO-OR

29 FEB 1972

SUBJECT: Recommended Additions to AR 310-50

HQDA (DAFD-OT)
WASH DC 21003

1. Reference: AR 310-50, Authorized Abbreviations and Brevity Codes.
2. A review of current abbreviations used in unit and position titles indicates a lack of standardization in this area. To determine what degree of standardization might be achieved, a machine listing of position titles used in TOE was reviewed. As a result of this review, a list on non-standard abbreviations currently being used in TOE was compiled. These are listed at inclosure 1.
3. These abbreviations are used in more than 1500 TOE and over 2000 MTOE documents. Abbreviations marked with one asterisk are currently listed in reference AR for one form of the word, but need for the listed form is indicated and it is recommended both be included in the AR.
4. Request the abbreviation in the attached inclosure be considered for incorporation in the next update of reference AR. Any questions regarding this action should be directed to LT Robert D. Manning, Fort Belvoir, Virginia Ext 43328/42111.

FOR THE COMMANDER:

1 Incl
as

DR/H
DONALD R. HUNELL
CPT, AGC
Asst AG A

K-7

Accounting	acct*
Administration	admin*
Advisor	advr
Apprentice	appr*
Assembler	asblr
Assistance	asst*
Augmentation	aug*
Aidman	admn
Armorer	armr
Ammunition Bearer	ammo b
Air Frame	afrm
Aviator	avr
airdrop	adrp
Basal Metabolism Rate	BMR
Boatswain	btswn
Custodial	cust*
Communications-Electronics	COMEL
Clinic (al)	clin
Crew Chief	CWCH
Central Material Service	CMS
Central Issue Facility	CIF
Court Reporter	ct repr
Clerk	clk

*Concur with listed abbreviation: Recommend additional word form be added to AR 310-50.

Commander	cmdr
Career Counselor	car cslr
Claims	clm
Consultant	conslt
Cryptographer	crypto*
Disbursing	disb*
Draftsman	dftmn
Delivery	dlvr*
Digital	dgtl
Electrician	elec*
Employment	empymt
Entomology	ent
Field Artillery Digital Automatic Computer	FADAC
Forward Area Support Coordination Officer	FASCO
Guidance	guid
Grenadier	grendr
Generator	genr*
Highway	hwy
Historian	histn
Hygienist	hyg
Handler	hdlr
Helper	hlpr
Interrogator	intgr
Illustrator	illustr

K-9

Inspector	insp*
Instructor	instr*
Intensive	inten
Litter Bearer	LB
Library	lbry
Legal	leg
Machinist	machst
Mechanized flame thrower	MFT
Millimeter	mm
Multipurpose	mpps
Manual	man
Memorial activities	meml actv
Mobility	mbly
Management	mgmt
Multi channel	mt chl
Neuropsychiatric	np
Observer	obsr*
Prevention	pvnt
Processing	proc*
Programmer	prog*
Projector	projr
Power	pwr
Physical therapy	phys therp
Prosthetic	pros

K-10

Packing	pk*
Package(ing)	pkg
Parts	pts
Plans	pl
Preservation	pravn
Power train	pw trn
Pressman	prsm
Recorder	rcdr
Rotor	rtr
Ranger	rngr
Rifleman	rflmn
Rear Area Protection	RAP
Reconciliation	recncl
Requirements	rqmts
Rough Terrain	RT
Specialist	spec
Stenographer	steno
Supervisor	supv
Smoke	smk
Sanitation Inspector	San Insp
Statistical	stat*
SHILLELAGH	SHL
Special Electrical Devices	SED
Transportation	trans*

K-11

Turbine	turb
Track	tr
Tracked Vehicle	TrVeh
Towed	T
Unit Reference Sheet	URS
Vulcan	Vulc
Wheel Vehicle	WVeh
Welder	wldr
Wireman	wrmn
Wheeled	whl

K-12

UPDATE OF ENGINEER G-SERIES TOE

APPENDIX L

QUALITY IMPROVEMENT OF THE
TOE SYSTEM (U)

PHASE II

NEW JERSEY ACTIVITY 05-000	PERSONS CHARGES APPROVED BY COC NO	PERSONNEL CHARGES REQUIRING DA APPROVAL INCREASE/DECREASE	TOTAL PERS CHARGES FOR DA APPROVAL	EQUIP CH		EQUIP CHANGES		TOTAL
				APPROVED BY COC	APPROVED BY DA	BOIP	MISC	
050263500	82	2.3	82	206	3	7	10	10
050276500	35	7.0	20	100	5	3	8	8
050280500	58	1.3	14	68	5	4	9	9
050373700	30	.5	12	25	2	1	3	3
050385600	35	6.7	20	32	4	9	13	13
050393710, 20	71	4.5	15	109	-	4	4	4
050394700	64	6.7	28	75	2	1	3	3
050396700	55	2.2	34	71	2	-	2	2
050648300	14	3.7	15	39	1	4	5	5
050676500	22	3.7	13	41	-	2	2	2
050773700	39	4.5	23	63	1	4	5	5
050786600	48	.5	29	71	2	3	5	5
050976700	10	2.3	8	49	-	-	-	-
051016810, 20, 30	30	13.8	68	262	3	13	16	16
051076610, 20	126	1.0	41	233	2	16	18	18
051116800	30	6.3	25	100	2	8	10	10
051126700	45	13	26	91	2	2	4	4

MAN HOURS AGENCY CP-002	PERS CHANGE APPROVED BY CLC HQ	PERSONNEL CHANGES REQUIRING DA APPROVAL INCREASE/DECREASE	TOTAL PERS CHANGES FOR DA APPROVAL	EQUIP CH APPROVED BY CPO	EQUIP CHANGES APPROVED BY DA		TOTAL
					BOIP	MISC	
05114000	35 9.8	+5	7	50	6	11	17
05115000	28 7.6	-	9	101	2	7	9
05117000	37 6.0	+8	17	79	2	5	7
05118000	25 4.8	-1	8	54	4	4	8
05121000	35 6.0	-5	6	54	-	2	-
05127000, 20	120 1.0	+3	8	208	4	17	-
05128000	85 9.6	+2	5	83	7	5	12
05137000	67 .5	+2	5	100	6	12	18
05144000	272 11.8	-6	30	264	11	37	-
05147000	45 9.3	+2	3	93	3	21	-
05148000, 20	168 12.2	+9	15	235	9	40	49
05156000	98 17.8	+1	28	243	9	53	62
05157000	53 1.6	+2	2	82	4	22	26
05177000	46 4.5	-2	4	57	2	4	6
05196000	53 7.4	-4	5	164	3	7	10
05197000	48 7.2	-	8	77	1	6	7
05198000	39 3.9	+1	1	55	1	4	5
05201000	59 1.0	+2	-	72	-	-	-

	NOV HOURS ACTION C-200	REQ CHARGE APPROVED BY ODG NO	REMOVAL CHARGE REQUIRING DA APPROVAL INCREASE/DECREASE	TOTAL PERS CHARGES FOR DA APPROVAL	BOUP OR APPROVED BY ODC	BOUP CHANGES APPROVED BY DA BOUP MISC	TOTAL
052076800	29 8.3	23	+2	2	75	3 19	22
053060800	67 5.6	31	-	4	95	1 5	6
053076300	45 4.7	21	+3	5	64	4 2	6
053080610	30 2.1	10	+1	1	37	- 4	4
053270300	54 .5	2	+1	1	45	2 4	6
053440500	13 1.7	4	-	-	24	- -	-
053460700	34 6.2	25	+8	5	55	- 6	6
053470700	12 2.9	8	-	-	19	- 1	1
053480800	28 .4	3	-	-	9	- -	-
053490800	14 2.1	6	-1	-	21	- 1	1
054010900	45 4.5	37	-	4	145	4 7	11
054020700	36 3.5	34	+2	5	137	2 9	13
054060700	62 13	51	-41	31	184	5 33	38
054070800	30 7.5	14	-4	7	74	2 11	13
054080700	25 9.0	22	+7	9	93	5 18	23
0550008	6 1.4	14	+3	3	33	- -	-
0551007	5 3.0	12	-	-	22	1 -	1
0552008	94 3.0	17	+2	2	97	- 4	4
0553007	73 6.8	39	-	2	83	1 4	5

	MAN AGERS ACROSS CP-ODG	PERS CHANGES APPROVED BY SEC HQ	PERSONNEL CHANGES REQUIRING DA APPROVAL INCREASE/DECREASE	TOTAL PERS CHANGES FOR DA APPROVAL	EQUIP CH APPROVED BY ODC	EQUIP CHANGES APPROVED BY DA		TOTAL
						201P	MISC	
0534008	58	7.0	-	-	161	8	5	13
0535007	12	2.0	+2	2	14	-	-	-
0536007	21	2.0	-	2	22	-	4	4
0537007	28	2.5	-	-	18	-	3	3
AVERAGE								
	61	5.2	+24*	5	91	3	8	11

*This represents the
net personnel increase
rather than the average

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NR. TOE

58

107

L-4

RECOMMENDED CHANGES TO AR 310-31

MANAGEMENT SYSTEM FOR TOE

APPENDIX M

QUALITY IMPROVEMENT OF THE

TOE SYSTEM (U)

PHASE II

RECOMMENDED CHANGES TO PUBLICATIONS

For use of this form, see AR 310-1; the proponent agency is The Adjutant General's Office.

Use Part II (reverse side) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).

DATE

14 March 1972

TO: (Forward to proponent of publication) (Exclude RFP Code)

HQDA (DAFD-OTO)
WASH DC 20310

FROM: (Activity and location) (Exclude RFP Code)

HQ USACDC
Organization Directorate
Fort Belvoir, Virginia 22060

PART I - ALL PUBLICATIONS EXCEPT RPSTL AND SC/SM

PUBLICATION NUMBER

AR 310 31

DATE

May 1970

TITLE

Mgt System for Tables of Organization and Equipment

ITEM NO.	PAGE NO.	PARAGRAPH	LINE NO.*	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON (Exact wording of recommended change must be given)
1	1-4	1-10b (2)				Change subparagraph to read: "Verification of data in sections I, II and III of all TOE and TOE changes for which they are proponent." REASON: Deletes obsolete reference to consolidated change.
2	1-4	1-10c (2)				Change last sentence of subparagraph to read: "Only changes to TOE that result in an increase in personnel, standard of grade, or major item of PEMA equipment, change in position identity, or a change in the units mission, capability, mobility or concept of operation requires submission of a Plan TOE Change to HQ DA for approval." REASON: Limits requirements to staff TOE changes with DA to those having a major impact on the operational capability of the unit or those resulting in major personnel or PEMA equipment changes.
3	1-6	1-22a	1			Change to read: "Area of interest review of all plan TOE and of TOE changes that have major personnel or equipment implications or resulting in a change in the unit's concept of operation." REASON: Deletes reference to area of interest review of all TOE changes and limits it to those resulting in major changes in personnel, equipment and organizational concept. See Appendix G for letter to USAMC.
4	1-6	1-23a				Change subparagraph to read: "Area of interest review of all plan TOE and of TOE changes having major personnel or equipment implications or resulting in a change in the unit's concept of operation."

* Reference to line numbers within the paragraph or subparagraph.

TYPED NAME, GRADE, OR TITLE

SIGNATURE

DA FORM 2028
1 DEC 66

REPLACES DA FORM 2028, 1 APR 66, AND DA FORM 1068, 1 DEC 66, WHICH WILL BE USED.

M-1

RECOMMENDED CHANGES TO PUBLICATIONS

For use of GIC form, see AR J18-1; the proponent agency to The Adjutant General's Office.

Use Part II (reverse side) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).

DATE

14 March 1972

TO: (Forward to proponent of publication) (Include EIP Code)

FROM: (Activity and location) (Include EIP Code)

PART I - ALL PUBLICATIONS EXCEPT RPSTL AND SC/SM

PUBLICATION NUMBER

AR 310-31

DATE

May 1970

TITLE

Mgt System for Table of Organization and Equipment

ITEM NO.	PAGE NO.	PARAGRAPH	LINE NO.*	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON (Exact wording of recommended change must be given)
4 (Continued)						REASON: Same as item 3. Also see Appendix G for CONARC concurrence in this proposal.
5	1-6	1-22e 1-23b				Change sentence to read: "Post publication review of all TOE and TOE changes." REASON: Clarifies requirement for post publication review of TOE actions.
6	1-7	1-25b	2			Change to read: "... will furnish HQ USACDC <u>with six copies</u> of each approved detailed MTOE" REASON: Enables CDC to distribute necessary copies to proponent groups and agencies for review and analysis. Only NG and USAR now furnish the necessary copies required for timely review of MTOE.
7	2-1	2-5b				Delete entire subparagraph, replace with following: "Changes to applicable TOE will be published by the proponent on a semi-annual basis. Proponents will maintain an open transaction (suspense) file for each SRC in the published TOE data bank. Changes will be entered in the transaction file on a continuing basis. The file will be cut off once every six months and a numbered change prepared and sent to TAG for publication. The transaction file will then be re-opened to handle new input." REASON: Brings AR description of methods of updating TOE in line with single change system.
8	2-2	2-7				Deletes entire paragraph. Replace with following: Updating of published tables:

* Reference to line numbers within the paragraph or subparagraph.

TYPED NAME, GRADE, OR TITLE

SIGNATURE

DA FORM 2028
1 DEC 66

REPLACES DA FORM 2028, 1 APR 64, AND DA FORM 1996, 1 DEC 66, WHICH WILL BE USED.

M-2

110

RECOMMENDED CHANGES TO PUBLICATIONS Purpose of this form, see AF 310-1; the proponent agency is The Adjutant General's Office.						Use Part II (reverse side) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).		DATE	
TO: (Forward to proponent of publication) (Include EIP Code)						FROM: (Activity and location) (Include EIP Code)			
PART I - ALL PUBLICATIONS EXCEPT RPSTL AND SC/SM									
PUBLICATION NUMBER AR 310-31						DATE May 1970		TITLE Mgt System for Tables of Organization and Equipment	
ITEM NO.	PAGE NO.	PARAGRAPH	LINE NO.*	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON <i>(Exact wording of recommended change must be given)</i>			
8 (Continued)						a. The TOE data bank will be updated on a continuing basis and published tables on a semi-annual basis. b. TOE proponents will establish a transaction (suspense) file in the TOE data bank to serve as a temporary repository for approved changes to published TOE. These changes will be included in the monthly tape submitted to DA. c. Twice a year input to the transaction file will be cut off and a numbered change sent to TAGO for publication and distribution to the field. d. Proposed changes to TOE that result in personnel or major PEMA equipment increases, identity changes, increases in standard of grade, or changes in a unit concept of operation will be submitted to DA for review and approval before entry in the transaction file." e. Changes to published TOE not requiring DA approval include the following: (1) Application of MOS, standard of grade (SGA), MACRIT, and miscellaneous personnel changes directed by DA. Changes to duty position titles alone will not be used as the basis for a TOE change. (2) Incorporating equipment changes that are based on DA approved Basis of Issue Plans (does not include PEMA Item Budget List (PIBL) items) and items authorized in AR 310-34. (3) Incorporating personnel positions and equipment directed by DA.			
* Reference to line numbers within the paragraph or subparagraph.									
TYPED NAME, GRADE, OR TITLE						SIGNATURE			

DA FORM 2028
1 DEC 66

REPLACES DA FORM 2028, 1 APR 66, AND DA FORM 1899, 1 DEC 55, WHICH WILL BE USED.

M-3

111

RECOMMENDED CHANGES TO PUBLICATIONS For use of this form, see AR 310-1; the proponent agency is The Adjutant General's Office.						Use Part II (reverse side) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).		DATE	
TO: (Forward to proponent of publication) (Include ZIP Code)						FROM: (Activity and location) (Include ZIP Code)			
PART I - ALL PUBLICATIONS EXCEPT RPSTL AND SC/SM									
PUBLICATION NUMBER AR 310-31						DATE May 1970		TITLE Mgt System for Tables of Organization and Equipment	
ITEM NO.	PAGE NO.	PARAGRAPH	LINE NO.*	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON (Exact wording of recommended change must be given)			
8 (Continued)						(4) To promulgate HQ DA concept approval of areas listed above which do not require further justification or technical staffing. REASON: Deletes obsolete data and bring AR into line with single change system.			
9	2-13	2-42a				Add a subpara (8) Suggestions. Recommendations for changes to specific TOE or for improvements to the TOE system may be submitted directly to HQ, US Army Combat Developments Command on DA Form _____. A replica of the form will be included in all new and revised TOE. Local reproduction of the form is authorized. REASON: Incorporates a simplified system for submitting suggestions on specific TOE or the TOE system directly to CDC. Proposed form is shown at Appendix H (pg H-4).			
10	2-17	2-49				Delete entire paragraph and replace with following: <u>a. Enlisted Remarks</u> 01- Also light veh dvr 02- Also hvy veh dvr 03- Also track veh dvr 04-06 Reserved for future use. 07- Also info NCO 08- Also educ NCO 09- Position may be filled by either an EM or EW 10- Also career csir <u>b. Armament Remarks</u> 11- Armed w/pistol, auto cal 45			
* Reference to line numbers within the paragraph or subparagraph									
TYPED NAME, GRADE, OR TITLE						SIGNATURE			

DA FORM 2028
1 DEC 66

REPLACES DA FORM 2028, 1 APR 64, AND DA FORM 1066, 1 DEC 58, WHICH WILL BE USED.

M-4

112

RECOMMENDED CHANGES TO PUBLICATIONS For use of this form, see AR 310-15 the proponent agency to The Adjutant General's Office.						Use Part II (reverse side) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).		DATE	
TO: (Forward to proponent of publication) (Include ZIP Code)						FROM: (Activity and location) (Include ZIP Code)			
PART I - ALL PUBLICATIONS EXCEPT RPSTL AND SC/SM									
PUBLICATION NUMBER AR 310-31						DATE May 1970		TITLE Mgt System for Tables of Organization and Equipment	
ITEM NO.	PAGE NO.	PARAGRAPH	LINE NO.*	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON <i>(Exact wording of recommended change must be given)</i>			
10 (Continued)						12- Reserved for use in Mob TDA 13- Reserved for use in Mob TDA 14- Armed w/SMG, cal 45 15- Armed w/revolver, cal 38, 2" barrel 16- Armed w/revolver, cal 38, 4" barrel 17-19- Reserved for future use <u>c. Officers Remarks</u> 20- Also staff officer (Used only when staff position is a secondary position). 21- Also Uncon Warfare and Stability Operations Off 22- Also Asst S2 23- Also Asst S3 24- Also S4 and Munitions Off 25- Also Asst S4 26- Also Gen Educ Deval Off 27-36 Reserved for future use 37- Successful completion of the applicable course described in DA Pam 350-10 or equivalent training is required. 38- Position may be filled by either a male or female Off. 39- Must be prefix 5 qualified. <u>(Special Remarks)</u> 40-49 Reserved for use in Mob TDA 50- Not included in totals 51- Also Div Avn Off 52- Also Div Engr Off 53- Also Div Sig Off 54- Also Div Safety Off 55- Gen Staff with troops 56- May be BG when auth by theater commander. 57- May be any staff MOS			
* Reference to line numbers within the paragraph or subparagraph.									
TYPED NAME, GRADE, OR TITLE						SIGNATURE			

DA FORM 2028

REPLACES DA FORM 2028, 1 APR 64, AND DA FORM 1000, 1 DEC 63, WHICH WILL BE USED.

RECOMMENDED CHANGES TO PUBLICATIONS For use of this form, see AR 310-1, the preparation agency is The Adjutant General's Office.						Use Part II (reverse side) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).		DATE	
TO: (Forward to preparation of publication) (Include ZIP Code)						FROM: (Activity and location) (Include ZIP Code)			
PART I - ALL PUBLICATIONS EXCEPT RPSTL AND SC/SM									
PUBLICATION NUMBER AR 310-31						DATE May 1970		TITLE Mgt System for Tables of Organization and Equipment	
ITEM NO.	PAGE NO.	PARAGRAPH	LINE NO.*	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON <i>(Exact wording of recommended change must be given)</i>			
10	(Continued)					58- Aug mess pers for units providing mess this organization. 59-69 Reserved for future use <u>d. Organization Remarks</u> 70- Admin Complement Det No 1 71-72 Reserved for future use 73- To be included only when auth by DA. Not included in totals 74- Aug auth only when organized as a separate company. Not included in totals. 75- To be included only when auth by Theater Commander. Not included in totals. 76- Professional complement will be auth by DA when the unit is engaged in the actual care and treatment of patients or 60 days prior to departure for theater of operations. Not included in totals. 77- Aug auth only when the property book and equip status reporting element of the Div Log Sys (DLOGS) is not implemented in the division. 78- Aug auth only when the division data center element of the Div Log Sys (DLOGS) is not implemented in the division. 79- Reserved for future use <u>e. Warrant Officer Remarks</u> 80- Position may be filled by either a male or female warrant officer 81-94 Reserved for use in Mob TDA <u>f. Miscellaneous Remarks</u> 95-99 May be used for miscellaneous personnel remarks.			
* Reference to line numbers within the paragraph or subparagraph.									
TYPED NAME, GRADE, OR TITLE						SIGNATURE			

DA FORM 2028
1 DEC 66

REPLACES DA FORM 2028, 1 APR 64, AND DA FORM 1966, 1 DEC 56, WHICH WILL BE USED.

M-6 114

RECOMMENDED CHANGES TO PUBLICATIONS For use of this form, see AF 210-1; the proponent agency in The Adjutant General's Office.						Use Part II (reverse side) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).		DATE	
TO: (Forward to: parent of publication) (Include ZIP Code)						FROM: (Activity and location) (Include ZIP Code)			
PART I - ALL PUBLICATIONS EXCEPT RPSTL AND SC/SM									
PUBLICATION NUMBER AR 310-31						DATE May 1970		TITLE Mgt System for Tables or Organization and Equipment	
ITEM NO.	PAGE NO.	PARAGRAPH	LINE NO.*	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON <i>(Exact wording of recommended change must be given)</i>			
10	(Continued)					g. Proposals for standardizing additional personnel remarks will be submitted to HQ USACDC. If recommendation is concurred in by USACDC they will be forwarded to DA for review and approval and subsequent publication in AR 310-31. Any new remarks recommended for standardization must comply with the following: (1) Proposed remark is applicable to only one situation. Combination remarks will not be standardized. (2) Remark should be applicable to more than one TOE series. (3) Recommendation should include the number to be assigned the proposed remark. Number should be one of those currently "reserved for future use." h. The recommended format and instructions for submitting additional personnel remarks is provided at inclosure 1. This format will also be used for recommending deletions from the list of standardized remarks. REASON: Provides standard remarks for use in TOE and MTOE documents. Adoption will enhance use of automated retrieval of personnel data covered by standard remarks.			
11	A1	A11				Delete subparagraphs a and b. REASON: Information is obsolete.			
12	A1	A12				Delete current subparagraph and replace with following. Semi-annual TOE change. Published			
* Reference to line numbers within the paragraph or subparagraph.									
TYPED NAME, GRADE, OR TITLE						SIGNATURE			

DA FORM 2028
1 DEC 66

REPLACES DA FORM 2028, 1 APR 64, AND DA FORM 1686, 1 DEC 58, WHICH WILL BE USED.

M-7

115

RECOMMENDED CHANGES TO PUBLICATIONS For use of this form, see AR 318-1; the proponent agency is The Adjutant General's Office.						Use Part II (reverse side) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).		DATE 5 April 1972	
TO: (Proposed to programs or publications) (Include ZIP Code)						FROM: (Activity and location) (Include ZIP Code)			
PART I - ALL PUBLICATIONS EXCEPT RPSTL AND SC/SM									
PUBLICATION NUMBER AR 310-31						DATE May 1970		TITLE Mgt System for Tables of Organization and Equipment	
ITEM NO.	PAGE NO.	PARAGRAPH	LINE NO.*	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON <i>(Exact wording of recommended change must be given)</i>			
12	(Continued)					TOE will be updated when necessary, on a semi-annual basis, by publication of a numbered change. Separate changes will be published on an exception basis to satisfy specific needs of DA or the user.			
13	D-1	IIB	3			Add: Change number 99 denotes changes in the transaction file that have not been published in hard copy. REASON: Identifies use of 99 change number.			
14	2-12	2-43 (b)(2)				If standard position titles are approved by DA and incorporated in the AR 611 series and on the MOS tape produced at PERSINSCOM then this subparagraph should be changed to read: Duty position titles will be selected from those shown by code number in AR 611-_____. If a position is not adequately described by the titles listed in the MOS book then a new or revised title will be submitted to DA for review and approval. New position title will then be incorporated in the MOS book. Proposed position title may not be used until approved by DA. REASON: Revise subparagraph to reflect standard position titles and their use in TOE.			
15	D-6- D-22					Delete pg D6 - D22 and replace with: a. Flow charts to replace those outlined on pg D6-D9 will be provided under separate cover. b. Card and primary file layouts for new TOE processing system are attached. See proposed pages D10-D48. Pages D23 and D24 should be re-numbered as D49 & D50.			
* Reference to line numbers within the paragraph or subparagraph.									
TYPED NAME, GRADE, OR TITLE						SIGNATURE			

DA FORM 2028
1 DEC 61

REPLACES DA FORM 2028, 1 APR 64, AND DA FORM 1898, 1 DEC 59, WHICH WILL BE USED.

MB
116

RECOMMENDED CHANGES TO PUBLICATIONS For use of this form, see AR 310-1; the proponent agency is The Adjutant General's Office.						Use Part II (reverse side) for Repair Parts and Special Tool Lists (RP-STL) and Supply Catalogs/Supply Manuals (SC/SMA).		DATE
TO: (Forward to proponent of publication) (Include ZIP Code)						FROM: (Activity and location) (Include ZIP Code)		
PART I - ALL PUBLICATIONS EXCEPT RPSTL AND SC/SM								
PUBLICATION NUMBER AR 310-31						DATE May 1970		TITLE Mgt System For Tables of Organization and Equipment
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO.	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON <i>(Exact wording of recommended change must be given)</i>		
16	D-23 D-24					Change sample showing Aug Cmn as blank on DA Form 2949 and 2950 to reflect entry of data in line with new capability to use this column.		
17	E3 E4					Update sample TOE schedule distribution list to reflect reorganization of CDC.		
18				G2		Change Combined Arms Gp to Combat Systems Gp and Services and Support Gp to Pers and Log Systems Gp in accordance with recent reorganization.		
* Reference to line numbers within the paragraph or in paragraph.								
TYPED NAME, GRADE, OR TITLE						SIGNATURE		

DA FORM 2028
1 DEC 66

REPLACES DA FORM 2028, 1 APR 66, AND DA FORM 1968, 1 DEC 65, WHICH WILL BE USED.

M-9
117

INCLOSURE 1

BLOCK TITLE

PROPOONENT AGENCY

TOE SERIES:

RMK NO

REMARK

REFERENCE

RECOMMENDED ACTION

INSTRUCTIONS

STEP

Self-explanatory

Enter the TOE series, i.e., 1-; 5-; 35-;
etc., remark will be used in.

Proposed remarks will be listed in
numerical order.

Provide rationale as to why the proposed
remark is required.

Enter the source or reference that generated
the remark, if nonexistent, so indicate.

Check as appropriate.

Additional supporting data may be attached or included at the bottom of the form.

STANDARD REMARKS

PROPOSER:

TOE SERIES:

(Print all information)

RMK NO	REMARK	REFERENCE	RECOMMENDED ACTION ADD	DELETE
01	"Also Lt Veh Driver" Additional duties as drivers will be assigned to individuals at the discretion of the unit commander.	AR 310-31		X
10	"Also Career Counselor" Remark applies to units not assigned a Career Counselor.	DA Ltr, FOR OT OM to ACSFOR, DA, 28 Jan 71	X	
50	"Not included in Totals"	CDC Policy	X	

Format to be used in submitting recommendations for additional standardized remarks.

A CARD

SRC	CHANGE NUMBER	PROPOSER AGENCY	TOE SHORT TITLE	BLANK	Blank	STATUS	MASTER OR ELEMENT INDICATOR	PROPOSER	UNPUBLISHED CHANGE INDICATOR	CLASSIFICATION	RCN ("A")	TRANSACTION CODE

DATA ELEMENTS

COLUMNS

REFERENCE

STANDARD REQUIREMENTS CODE (SRC)	1-9	Para L, Part II & Para 2-40
CHANGE-NUMBER	10-11	Para B, Part II
PROPOSER AGENCY (CDC)	12-14	GDC Internal Use
BLANK	15	
TOE-SHORT-TITLE	16-62	Para O, Part II
BLANK	63-64	
STATUS	65	Para P, Part II
MASTER OR ELEMENT INDICATOR	66	Para G, Part II
TOE CATEGORY	67	Para M, Part II, & Para 2-15
PROPOSER	68-69	Para N, Part II
BLANK	70-76	
UNPUBLISHED CHANGE INDICATOR	77	Internal to Machine Processing
CLASSIFICATION	78	Para K, Part II
RCN ("A")	79	Para H, Part II
TRANSACTION CODE	80	Internal to Machine Processing

TOE TABLE HEADER, RECORD CONTROL NUMBER (RCN = "A")

INCLOSURE 2

D10

120

R CARD[illegible]

DATA ELEMENTS

COLUMNS

REFERENCE

STANDARD REQUIREMENTS CODE (SRC)	1-9
CHANGE NUMBER	10-11
PARAGRAPH NUMBER	12-13
BLANK	14-15
PARAGRAPH DESCRIPTION	16-36
CROSS-REFERENCE-SRC	37-45
UNIT-MULTIPLIER	46-51
AUGMENTATION REMARK #	52-57
BLANK	58-74
PERSONNEL CLASSIFICATION	75
EQUIPMENT CLASSIFICATION	76
UNPUBLISHED CHANGE INDICATOR	77
PARAGRAPH CLASSIFICATION	78
RCN ("B")	79
TRANSACTION CODE	80

Para L, Part II & Para 2-40
Para B, Part II
Para 2-43b

Para 2-43b and 2-44d
Para C, Part II
Para Q, Part II

Para K, Part II
Para K, Part II
Internal to Machine Processing
Para K, Part II
Para H, Part II
Internal to Machine Processing

TOE PARAGRAPH HEADER, SECTION II & III (RCN - "B")

C CARD

SRC	CHANGE NUMBER	PARAGRAPH NUMBER	LINE NUMBER	POSITION TITLE	GRADE CODE	MOS	BRANCH CODE	REMARK NO. (3)	STRENGTH LEVELS					AUGMENTATION	CADRE	TYPE B	LEVEL 3	LEVEL 2	LEVEL 1	BLANK	CONTROLLED MOS INDICATOR	BOI PENDING INDICATOR	UNPUBLISHED CHANGE IND.	CLASSIFICATION	RCN ("C")	TRANSACTION CODE
									LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7														

DATA ELEMENT

COLUMNS

REFERENCE

STANDARD REQUIREMENTS CODE (SRC)	1-9
CHANGE NUMBER	10-11
PARAGRAPH NUMBER	12-13
LINE NUMBER	14-15
POSITION TITLE	16-37
GRADE CODE	38-39
MOS	40-44
BRANCH CODE	45-46
REMARK NO (3 REMARKS)	47-52
STRENGTH LEVELS	
LEVEL 1	53-55
LEVEL 2	56-58
LEVEL 3	59-61
TYPE B	62-64
CADRE	65-67
AUGMENTATION	68-70
BLANK	71-74
CONTROLLED MOS INDICATOR	75
BOI PENDING INDICATOR	76
UNPUBLISHED CHANGE IND.	77
CLASSIFICATION	78
RCN ("C")	79
TRANSACTION CODE	80

Para L, Part II, & Para 2-40
 Para B, Part II
 Para 2-43b
 Para 2-43b
 Para 2-43b
 Para D, Part II
 Para, 2-43b
 Para 2-43b
 Para 2-43b

The Columns reflect the Actual
 Strength Levels for the Columns
 specified.

Internal to Machine Processing
 Internal to Machine Processing
 Internal to Machine Processing
 Para X, Part II
 Para H, Part II
 Internal to Machine Processing

TOE PERSONNEL DETAIL, SECTION II (RCN = "C")

D CARD

SRC	CHANGE NUMBER	PARAGRAPH NUMBER	BLANK	LIN	REMARK NUMBER	EQUIPMENT LEVELS					BLANK	TRANSACTION CODE
						LEVEL 1	LEVEL 2	LEVEL 3	TYPE B	AUGMENTATION		

DATE ELEMENT

COLUMNS

REFERENCE

STANDARD REQUIREMENTS CODE (SRC) 1-5
CHANGE NUMBER 10-11
PARAGRAPH NUMBER 12-13
BLANK 14-15
LINE ITEM NUMBER (LIN) 16-21
BLANK 22-46
REMARK - NUMBER 47-49
EQUIPMENT LEVELS
LEVEL 1 50-53
LEVEL 2 54-57
LEVEL 3 58-61
TYPE B 62-64
AUGMENTATION 65-67
BLANK 68-76
UNPUBLISHED CHANGE IND 77
CLASSIFICATION 78
RCN ("D") 79
TRANSACTION CODE 80

Para L, Part II, & Para 2-40
Para B, Part II
Para 2-44d
Para F, Part II & Para 2-44d
Para 2-44d & AR 310-34

These Columns reflect the Actual
Equipment Quantities required for
Each Level Specified.

Internal to Machine Processing
Para K, Part II
Para H, Part II
Internal to Machine Processing

TOE EQUIPMENT DETAIL, SECTION III (RCN = "D")

D13

E CARD

SRC	REMARK	DESCRIPTION	BLANK
CHANGE NUMBER	SRC I R A K NO		

<u>DATA ELEMENTS</u>	<u>COLUMNS</u>	<u>REFERENCE</u>
STANDARD REQUIREMENTS CODE (SRC)	1-9	Para L, Part II & Para 2-40
CHANGE NUMBER	10-11	Para B, Part II
REMARK NUMBER		
SECTION I: BLANK	12	
REMK #	13-14	Para 2-43b
SECTION III: REMK #	12-14	Para 2-44d
SEQUENCE CODE	15	Used for sequencing of print lines for Narrative description.
REMARK DESCRIPTION	16-70	Para 1, Part II
BLANK	71-76	
UNPUBLISHED CHANGE IND	77	Internal to Machine Processing
CLASSIFICATION	78	Para K, Part II
RCN ("E")	79	Para H, Part II
TRANSACTION CODE	80	Internal to Machine Processing

TOE REMARK NARRATIVE, SECTION II & III (RCN = "E")

D14

**PRIMARY FILE LAYOUTS
AND DATA ELEMENT DESCRIPTIONS**

D15

12/21/11

* Indicates Revised Criminal Format

Key

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best available copy.

MULTIPLE CARD		XUT		TDE C FILE		700 BYTES		11/19/71	
PERSONNEL POSITION TITLE		BRANCH		MOS		SERIAL		DATE	
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Reproduced from best available copy.

* Indicating Paced Decimal Format

Key

DA FORM 3165

TOE E (LESS NO. N.) FILE

534765

11/19/21

Reproduced from
best available copy.

* Indicators Sacred Vernal Field

key

128

DI 8

DA FORM 3165

MULTIPLE CAPD L JT
(SEE 12.7)

TOE F FILE 74 BYTES

11/10/71

KENNICK

Δ

* Indicates Paced Aerial Format

Key

SEC	SEC	REMARK NO	CHANGE NO	DATE	TIME
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48
49	50	51	52	53	54
55	56	57	58	59	60
61	62	63	64	65	66
67	68	69	70	71	72
73	74	75	76	77	78
79	80	81	82	83	84
85	86	87	88	89	90
91	92	93	94	95	96
97	98	99	100	101	102

MULTIPLE CARD LAYOUT
(SEE 12-2)

TOE N FILE 70 BYTES 1/5/72

NON-RECURSIVE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

RECORD LAYOUT SHEETS

D21

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 1	NUMBER OF PAGES 4	
		DATE		
SYSTEM ID TOE	RECORD LENGTH 74	PREPARED BY LT DIVECCHIO		
CARD	<u>DISK</u>	TAPE	OTHER	
		FILE ID	A FILE	
REC PER BLK 22	REMARKS		RECORD IS: AREC	
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
1	Delete Code Value: High Value= Deleted Record Key for A Record Sub-Items: A-SRC A-RCN-PARA-CHG-P	A-DELETE	A/N 1 Char	1
2	Part of Key for a record. Contains the SRC. Sub-Items: A-SRC-P	A-SRC		2-8
2.1	Part of Key. Contains first 5 digits of SRC in packed decimal Values: to 99998 NOTE: 99999 marks a dummy EOF record	A-SRC-P	N 5 digits Comp-3	2-4
2.2	Part of Key (Last 4 bytes of SRC)	A-SRC-U		5-8
2.21	TOE Series ID Values: "A"-"Z" NOTE: "Z" mark Dummy EOF record	A-SERIES	A/N 1 Char	5
2.22	1 Character indicating the year of the TOE Values: Normally a number NOT "Z" marks dummy EOF record	A-YEAR	A/N 1 Char	5
2.23	Variation Code Value: Any legal characters NOTE: "ZZ" marks dummy EOF record	A-VAR	A/N	7-8

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 2	NUMBER OF PAGES 4	
		DATE		
SYSTEM ID TOE	RECORD LENGTH 74	PREPARED BY LT DIVECCHIO		
CARD	<u>DISK</u>	TAPE	OTHER	
		FILE ID	A FILE	
REC PER BLK 22	REMARKS	RECORD IS AREC		
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
3	1. Part of key 2. Contains the Record type - 1 digit paragraph - 2 digit change no. - 2 digit 3. In packed decimal VALUES: Record Type = 1 - 'A' 2 - 'DATE' 3 - 'B' Paragraph = 00 to 99 Change No = 00 to 98 NOTE: 99999 marks dummy EOF record	A-RCN-PARA CHG-P	N 5 digit Comp-3	9-11
4	Published - Processed Code VALUES: 1 = published SRC 2 = in process SRC	A-PUB-PROC	N 1 digit	12
5	1. Effective Date 2. Packed Decimal VALUES: First Digit is a Zero Last 6 digits is date in 'YYMMDD'	A-Eff-DATE-P	N 7 Digits Comp-3	13-16
6	1. Proponent Agency 2. Packed Decimal VALUES: Same as current system	A-PROP-AGEN-P	N 3 digits COMP-3	

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 3	NUMBER OF PAGES 4	
		DATE		
SYSTEM ID TOE	RECORD LENGTH 74	PREPARED BY LT DIVECCHIO		
CARD <u>DISK</u> TAPE OTHER	FILE ID A FILE			
REC PER BLK 22	REMARKS	RECORD IS AREC		
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
7	1. Master Element Indicator VALUES: 1 - DIV 2 - BDE 3 - CMD/SPT 4 - BATTALION 5 - SQUAD 6 - COMPANY	A-MEI	A/N	19
8	1. Status Code VALUES: D - DRAFT P - PLANNED F - FINAL	A-STATUS	A/N 1 Char	20
9	Category of SRC VALUES: 1 - COMBAT SPT 2 - GENERAL SPT 3 - SERVICE SPT	A-CATEGORY	A/N 1 Char	21
10	1. Classification of entire SRC VALUES: U - UNCLASSIFIED C - CONFIDENTIAL	A-CLASSIF	A/N	22
11	Unpublished change code VALUES: Space = SRC Contains no unpublished changes 1 = SRC contain 1 or more unpublished changes	A-UNPUB-CHG	A/N 1 Char	23

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 4	NUMBER OF PAGES 4	
		DATE		
SYSTEM ID TOE	RECORD LENGTH 74	PREPARED BY LT DIVECCHIO		
CARD <u>DISK</u> TAPE OTHER	FILE ID			
REC PER BLK 22	REMARKS	RECORD IS AREC		
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
12	Title (Long 48 Characters)	TOE-TITLE		24-71
12.1	Title (Truncated)	TOE-SHORT-TITLE	A/N 27 Char	24-50
12.2	Filler	FILLER-A1	A/N 3 Char	51-53
12.3	Superceeded by new SRC	SUPERCEED	A/N 17 Char	54-71
13	EOI Fiscal Year	EOI-FY	N 2 Char	72-73
14	Filler	FILLER-A	A/N 1 Char	74

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 1	NUMBER OF PAGES 4	
		DATE		
SYSTEM ID TOE	RECORD LENGTH 74	PREPARED BY LT DIVECCHIO		
CARD	DISK	TAPE	OTHER	
		FILE ID A FILE		
REC PER BLK 22	REMARKS		RECORD ID DATE-REC	
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/CLASS	LOCATION
1	Same as A-Delete	DATE-DELETE	A/N 1 Char	1
	Same as A-Key	D-KEY	--	2-11
2	Same as A-SRC	D-SRC	--	2-8
2.1	Same as A-SRC-P	D-SRC-P	N 5 digits Comp-3	2-4
3	Same as A-RCN-PARA-CHG-P	D-RCN-PARA-CHG-P	N 5 digits Comp-3	9-11
4	Same as A-PUB-PROC	DATE-PUB-PROC	N 1 digit	12
5	1. Dates for Organization Dir Sub-Item: LATE-OCC-P	DATE-TOTAL		13-44
5	1. Date for Organ Dir 2. Must be subscripted VALUES: Date in Form "YMMDD" NOTE: "Y" is only second digit of year	DATE-OCC-P	N 5 digits Comp-3 Occurs 16 times	13-60

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 2	NUMBER OF PAGES 4
		DATE	
SYSTEM ID TOE	RECORD LENGTH 74	PREPARED BY LT DIVECCHIO	
CARD	DISK	TAPE	OTHER
FILE ID		A FILE	
REC PER BLK 22	REMARKS	RECORD ID DATE-REC	
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS
	LOCATION		
5	1. Dates 2. Redefines Date-Total Sub-Items: DATE-1-P DATE-2-P DATE-3-P DATE-4-P DATE-5-P DATE-6-P DATE-7-P DATE-8-P DATE-1A-P DATE-2A-P DATE-3A-P DATE-4A-P DATE-5A-P DATE-6A-P DATE-7A-P DATE-8A-P VALUES: (for all sub-Items) Same as for DATE-OCC-P	ORG-DATE-P	
			13-60
5.1	1. Date #1	DATE-1-P	N 5 digits Comp-3
			13-15
5.2	1. Date #2	DATE-2-P	N 5 digits Comp-3
			16-18
5.3	1. Date #3	DATE-3-P	N 5 digits Comp-3
			19-21
5.4	1. Date #4	DATE-4-P	N 5 digits Comp-3
			22-24

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 3	NUMBER OF PAGES 4	
SYSTEM ID TOE		RECORD LENGTH 74	PREPARED BY LT DIVECCHIO	
CARD	DISK	TAPE	OTHER	
FILE ID		A FILE		
REC PER BLK 22	REMARKS		RECORD ID DATE-REC	
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
5.5	1. Date #5	DATE-5-P	N 5 digits Comp-3	25-27
5.6	1. Date #6	DATE-6-P	N 5 digits Comp-3	28-20
5.7	1. Date #7	DATE-7-P	N 5 digits Comp-3	31-33
5.8	1. Date #8	DATE-8-P	N 5 digits Comp-3	34-36
5.1A	Date #1A	DATE-1A-P	N 5 digits Comp-3	37-39
5.2A	Date #2A	DATE-2A-P	N 5 digits Comp-3	40-42
5.3A	DATE #3A	DATE-3A-P	N 5 digits Comp-3	43-45
5.4A	DATE #4A	DATE-4A-P	N 5 digits Comp-3	46-48
5.5A	DATE #5A	DATE-5A-P	N 5 digits Comp-3	49-51

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 4	NUMBER OF PAGES 4	
		DATE		
SYSTEM ID TOE	RECORD LENGTH 74	PREPARED BY LT DIVECCHIO		
CARD	DISK	TAPE	OTHER	
		FILE ID A FILE		
REC PER BLK 22	REMARKS		RECORD-ID	
		DATE-REC		
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
5.6A	DATE #6A	DATE-6A-P	N 5 digit Comp-3	52-54
5.7A	DATE #7A	DATE-7A-P	N 5 digit Comp-3	55-57
5.8A	DATE #8A	DATE-8A-P	N 5 digit Comp-3	58-60
6	Type of Change	TYPE-C	N 1 digit	61
7	Status-Report Remark	STATUS-REMK	A/N 12 Char	62-73
8	Remark Identification	REMK-ID	N 1 digit	74

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.			PAGE NUMBER 1	NUMBER OF PAGES 5
			DATE	
SYSTEM ID TOE		RECORD LENGTH 74	PREPARED BY LT DIVECCHIO	
CARD DISK TAPE OTHER			FILE ID A File	
REC PER BLK 22		REMARKS	BREC	
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
1	Delete Code Values: High Values = Deleted Record Key for B-Record Sub-Items: B - SRC B - RCN-PARA-CHG-P	B-DELETE	A/N 1 Char	1
2	Part of Key Sub-Items: B-SRC-P B-SRC-U	B-KEY		2-11
2.1	1. Part of Key 2. Contains first 5 digits of SRC in packed decimal Values: 00000 to 99998 NOTE: 99999 marks a dummy EOF Record	B-SRC	N 5 digits Comp-3	2-8
2.2	Same as A-SRC-U	B-SRC-P		2-1
2.21	Same as A-Series	B-SRC-U		5-8
2.22	Same as A-Year	B-Series	A/N	5
2.23	Same as A-VAR	B-Year	1 Char A/N 1 Char	6
		B-VAR	A/N 2 Char	7-8

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 2	NUMBER OF PAGES 5	
		DATE		
SYSTEM ID TOE	RECORD LENGTH 74	PREPARED BY IT DIVECCHIO		
CARD DISK TAPE OTHER	FILE ID A FILE			
REC PER BLK 22	REMARKS PRELIMINARY	B REC		
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
3	1. Part of Key 2. Contains the Record Type - 1 digit Paragraph - 2 digits Change No - 2 digits 3. In packed decimal Values: Rec Type - 1 = "A" 2 = "ATE" Paragraph = 00 to 99 3 = "B" Change No = 00 to 98 Special value "99" indicates date record NOTE: 99999 marks dummy EOF record	B-RCN-PARA- CHR-P	N 5 digits Comp-3	9-11
4	1. Published - In process code Values: "1" = Published TOE "2" = In-Process TOE	B-PUB-PROC	N	12
5	Classifications Sub-Items: Per - Classif EQU - Classif REC - Classif	B-Classif		13-15
5.1	1. Personnel (Section II) Classification Values: "U" = UNCLASS "C" = CONFIDENTIAL	PER-CLASSIF	A/N 1 Char	13

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 3	NUMBER OF PAGES 5	
		DATE		
SYSTEM ID TOE	RECORD LENGTH 74	PREPARED BY LT DIVECCHIO		
CARD DISK TAPE OTHER	FILE ID A FILE			
REC PER BLK 22	REMARKS PRELIMINARY	B REC		
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
5.2	1. Equipment (Section III) Classification Values: Same as PER-CLASSIF	EQU-CLASSIF	A/N 1 Char	14
5.3	1. Classification of this record Values: Same as PER-CLASSIF	REC-CLASSIF	A/N 1 Char	15
6	1. Title of SEC II & III Paragraph	PARA-TITLE	A/N 21 Chars	16-36
7	1. Augmentation Remark Nos. Sub-Items: PER EQU	AUG-REMK		37-40
7.1	1. Remark # for Section II Values: 000 to 099	PER	N 3 digits Comp-3	37-38
7.2	1. Remark for Section III Values: 100 to 999	EQU	N 3 digits Comp-3	39-40
8	1. Cross-Reference SRC Sub-Items: X-REF-SRC-P X-REF-SRC-U	X-REF-SRC		41-47
8.1	1. First 5 digits of cross-ref SRC	X-REF-SRC-P	N 5 digits	41-43

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 4	NUMBER OF PAGES 5	
		DATE		
SYSTEM ID TOE	RECORD LENGTH 74	PREPARED BY LT DIVECCHIO		
CARD DISK TAPE OTHER	FILE ID A FILE			
REC PER BLK 22	REMARKS PRELIMINARY	B REC		
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
	2. Packed Decimal Values: 0000 to 99998		Comp-3	
8.2	1. Last 4 Chars of Cross-Ref SRC	X-REF-SRC-U	A/N 4 Chars	44-47
9	Unit-Multipliers Sub-Item: U-MULT	U-MULT-TOTAL		48-53
9	Unit Multipliers values: 000 to 999	U-MULT	N 3 digits Comp-3 Occurs 3 times	48-53
9	1. Unit-Multipliers 2. Redefines U-MULT-TOTAL Sub-Items: UNIT-MULT-1-P UNIT-MULT-2-P UNIT-MULT-3-P	UNIT-MULT		48-53
9.1	1. Unit Multiplier #1 Values: 000 to 999	UNIT-MULT-1-P	N 3 digits Comp-3	48-49
9.2	1. Unit Multiplier #2 Values: 000 to 999	UNIT-MULT-2-P	N 3 digits Comp-3	50-51

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RECORD LAYOUT For use of this form, see AR 16-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 5	NUMBER OF PAGES 5		
		DATE			
SYSTEM ID TOE		RECORD LENGTH 74	PREPARED BY LT DIVECCHIO		
CARD DISK TAPE OTHER			FILE ID A FILE		
REC PER BLK 22	REMARKS		B REC		
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION	
9.3	1. Unit Multiplier #3 Values: 000 to 999	UNIT-MULT-3-P	N 3 digits Comp-3	52-53	
10	1. Unpublished Change Values: 1 Record has unpub. change to be applied φ Record has no unpublished change to be applied	B-UNPUB-CHG	A/N 1 Char	54	
11	Filler	FILLER-B	A/N Char	55-74	

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.			PAGE NUMBER 1	NUMBER OF PAGES 6
			DATE	
SYSTEM ID TOE		RECORD LENGTH 70	PREPARED BY LT CORDER	
CARD	DISK	TAPE	OTHER	FILE ID C FILE
REC PER MLK 23	REMARKS		C REC	
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
1	Delete Code Values: High - Values = Deleted Record Key for C-Record Sub items: C-SRC C-RCN-PARA-LINE-CHG-P	C-DELETE C-KEY	A/N 1 Char	1
2	Part of Key Sub-Items: C-SRC-P C-SRC-U	C-SRC		2
2.1	1. Part of Key 2. Contains first 5 digits of SRC in packed format Values: 00000 - 99998 99999 Designates EOF Record	C-SRC-P	N 5 digits Comp-3	2-4
2.2	1. Part of Key 2. Contains last 4 digits of SRC NOTE: 'ZZZZ' makes dummy EOF record Sub-fields: C-Series C-Year C-VAR	C-SRC-U	A/N 4 Char	5-8
2.21	1. Series	C-SERIES	A/N	5

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.			PAGE NUMBER 2	NUMBER OF PAGES 6
			DATE	
SYSTEM ID TOE		RECORD LENGTH 70	PREPARED BY IT CORDES	
CARD	DISK	TAPE	OTHER	
			FILE ID C FILE	
REC PER BLK 23	REMARKS		C REC	
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
2.22	1. Year	C-YEAR	A/N 1 Char	6
2.23	1. Variation	C-VAR	A/N 2 Char	7-8
3	1. Part of Key 2. Contains the Record Type - 1 digit Paragraph - 2 digit Line No - 2 digits Chg No - 2 digits 3. In packed decimal Values: Rec Type - "4" = C Paragraph = 00 - 99 Line = 00 - 99 Chg No = 00 - 98 NOTE: 9999999 marks dummy EOF record	C-RCN-PARA- LINE-CHG-P	N 7 digits Comp-3	9-12
4	Published or Process Code Values: 1 - Published TOE 2 - In-Process TOE	C-PUB-PROC	N 1 Char	13
5	Persobnel Position Title	POSIT-TITLE	22 Char A/N	5
6	Grade	GRADE	A/N 2 Char	36-37

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 3	NUMBER OF PAGES 6	
SYSTEM ID TOE		RECORD LENGTH 70	PREPARED BY LT CORDES	
CARD	<u>DISK</u>	TAPE	OTHER	
FILE ID		C FILE		
REC PER BLK 23	REMARKS		C REC	
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/CLAS	LOCATION
6	Values: 02-08 (Alpha O) E2-E9 W1			
7	MOS	MOS	A/N 5 Char	38-42
8	Branch Values: AD, AG, AM, AN, AR, CA, CH, CM, DE, EN, FA, FI, GO, IN, JA, MC, MI, MP, MS, NC, OD, QM, SC, SM, SP, SS, TC, VC, WC	BRANCH	A/N 2 Char	43-44
8	Dummy Name Sub Items: C-REMK	C-REMK-TOTAL		45-50
8	C Record Remarks Occurs 3 times Picture S99	C-REMK	N signed	45-50
8	Redefines C-REMK-TOTAL Subfields: REMK-NO-1-P REMK-NO-2-P REMK-NO-3-P NOTE: This field refines C-REMK-TOTAL. It allows you to access the remarks one at a time instead of subscripted.	REMK-NO		45-50
8.1	Remark #1 Values: 00-99	REMK-NO-1	N 2 bytes	45-46

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.			PAGE NUMBER 4	NUMBER OF PAGES 6
			DATE	
SYSTEM ID TOE		RECORD LENGTH 70	PREPARED BY IT CODES	
CARD	DISK	TAPE	OTHER	FILE ID C FILE
REC PER BLK 23		REMARKS		C REC
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
8.1	ASI Redefines REMK-NO-1 Additional Skill Identifier Values: Numeric followed by Alpha Alpha followed by Numeric	ASI	A/N 2 bytes	45-46
8.2	REMARK #2 Values: 00-99	REMK-NO-2	N 2 digits signed	47-56
8.3	Remark #3 Values: 00-99	REMK-NO-3	N 2 digits signed	49-50
9	Personnel Strength Levels Subfields: PER-STRENGTH occurs 6 times	PER-STR-TOTALS		51-62
9	1. Access each strength level by subscript	PER-STRENGTH	3 digits signed Comp-3	45-62
9	2. S999 ~ Packed decimal 1. Redefines PER-STR-TOTALS 2. Subfields: STR-LEV-1-P STR-LEV-2-P STR-LEV-3-P STR-LEV-A-P STR-LEV-B-P	PER-STR-TOTAL		45-62

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 5	NUMBER OF PAGES 6	
SYSTEM ID T0E		RECORD LENGTH 70	PREPARED BY LT CORDES	
CARD	<u>DISK</u>	TAPE	OTHER	
FILE ID G FILE				
REC PER BLK 23	REMARKS		G REC	
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
9	STR-LEV-C-P			
	3. Allows access of each strength level separately			
9.1	Strength Level 1	STR-LEV-1-P	N Comp-3 3 digits signed	51-52
9.2	Strength Level 2	STR-LEV-2-P	N Comp-3 signed S999	53-54
9.3	Strength Level 3	STR-LEV-3-P	N Comp-3 Signed S999	55-56
9.4	Strength Level Augmentation	STR-LEV-A-P	N Comp-3 Signed S999 3 digits	57-58
9.5	Strength Level Type B	STR-LEV-B-P	N Comp-3 3 digits signed S999	59-60
9.6	Strength Level Cadre	STR-LEV-C-P	N Comp-3 3 digits signed S999	61-62

RECORD LAYOUT For use of this form, see AR 18-7; the component agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 6	NUMBER OF PAGES 6
		DATE	
SYSTEM ID TOE	RECORD LENGTH 70	PREPARED BY LT CORDES	
CARD	DISK	TAPE	OTHER
		FILE ID C FILE	
REC PER BLK 23	REMARKS	C REC	
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS
10	1. Identifies Whether or not the MOS is a Controlled MOS 2. 1 = Controlled MOS 0 = Not a controlled MOS	CONTR-MOS	A/N 1 Char
11	1. If a BOI is pending against a particular MOS 2. 1 = BOI PEND 0 = No BOI PEND	C-BOI-PEND	A/N 1 Char
12	1. Unpublished change pending against Detail Line 2. Value: Spaces = No unpub change 1 = Unpub Change	C-UNPUB-CHG	A/N Comp-3 1 Char
12	1. Identifies Classification 2. U = Unclassified C = Confidential	C-CLASSIF	A/N 1 Char
13	1. Filler	FILLER-C	A/N 4 Char

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.				PAGE NUMBER 1	NUMBER OF PAGES 4
SYSTEM ID TOE				RECORD LENGTH 33	
CARD				DISK	
TAPE				OTHER	
FILE ID				E FILE	
REC PER BLK 3S				REMARKS	
E REC					
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION	
1	Delete Code VALUES: Deleted Record = High Values Key for E Record Sub-items: E-SRC E-RCN-PARA.P E-LIN	E-DELETE	A/N 1 Char	1	
2.1	1. Part of Key 2. Contains first 5 digits of key in packed decimal VALUES: 00000 to 99999 NOTE: 99999 marks a du / EOF record	E-KEY		2-15	
2.2	1. Part of Key 2. Contains last 4 characters of SRC NOTE: ZZZZ = Dummy EOF record 3. Sub-Fields: E-Series E-Year E-VAR	E-SRC-P	N 3 bytes Comp-3 5 digits signed	2-4	
2.2	1. Part of Key 2. Contains last 4 characters of SRC NOTE: ZZZZ = Dummy EOF record 3. Sub-Fields: E-Series E-Year E-VAR	E-SRC-U	A/N 4 Char	5-8	
2.21	1. Series	E-SRC-U	A/N 1 Char	5	
2.22	1. Year	E-YEAR	A/N 1 Char	6	
2.23	1. Variation	E-VAR	A/N 2 Char	7-8	

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 2	NUMBER OF PAGES 4	
		DATE		
SYSTEM ID TOE	RECORD LENGTH 33	PREPARED BY LT CORDES		
CARD	DISK	TAPE	OTHER	
FILE ID				
REC PER BLK 35	REMARKS	E REC		
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
3	1. Part of Key 2. Contains paragraph number and section number of 5 VALUE: 500 to 599	E-RCN-PARA-P	N 3 digits packed	9-10
4	1. Line item number Subfields - E-LIN-U E-LIN-CHG-P	E-LIN		11-15
4.1	1. Part of LIN 2. First character of LIN VALUES: A to Z	E-LIN-U	A/N 1 Char	11
5	1. Second part of LIN and change number 2. 7 digits packed	E-LIN-CHG-P	N 7 digits Comp-3	12-15
6	1. Pub or Process bytes 2. VALUES: "1" = Published TOE "2" = In-Process TOE	E-PUB-PROC	A/N 1 Char	16
7	1. Remark number VALUE: 00-99	E-REMK-NO	N 3 digits Comp-3	17-18
8	1. Equipment Levels 2. Packed 3 digits for 5 fields 3. Calls all equipment level together 4. Sub-fields EQUIP-LEVEL (1-5)	EQUIP-LEV-TOTAL	N 5 digits Comp-3	19-28

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.			PAGE NUMBER	NUMBER OF PAGES
			DATE	
SYSTEM ID TOE		RECORD LENGTH 33	PREPARED BY LT CORDES	
CARD	DISK	TAPE	OTHER	FILE ID E FILE
REC PER BLK 38	REMARKS		E REC	
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
8	1. Redefines equipment levels 2. Allows access to each equipment level by name or as a unit Sub-fields: EQU-LEVEL-1 EQU-LEVEL-2 EQU-LEVEL-3 EQU-LEVEL-A EQU-LEVEL-B 3. Packed Field 15 digits	EQU-LEVEL	N 15 digits Comp-3	19-28
8.1	1. First equipment level 2. Packed - 3 digits	EQU-LEVEL-1	N 3 digits Comp-3	19-20
8.2	2. Second Equipment Level	EQU-LEVEL-2	N 3 digits Comp-3	21-22
8.3	1. 3rd Equipment Level 2. Packed 3 digits	EQU-LEVEL-3	N 3 digits Comp-3	23-24
8.4	1. Equipment Level Augmentation 2. 3 digits -packed	EQU-LEVEL-A	N 3 digits Comp-3	25-26
8.5	1. Equipment Level (Type B) 2. 3 digits packed	EQU-LEVEL-B	N 3 digits Comp-3	27-28
9	1. Indicates whether or not an unpublished is applied against the record 2. VALUE: Space = Unpub Change P = Published Change	E-UNPUB-CHG	A/N 1 Char	29

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 1	NUMBER OF PAGES 3	
		DATE		
SYSTEM ID TOE	RECORD LENGTH 74	PREPARED BY LT CORDES		
CARD <u>DISK</u> TAPE OTHER	FILE ID F FILE			
REC PER BLK 22	REMARKS	F Rec		
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
1	1. Delete Code 2. Values: High-Values - DELETED Record	F-DELETE	A/N 1 Char	1
	1. Key for F Record 2. Subfields: F-SRC F-RENK-NO-P ALPHA-SEQ F-CHG-NO	F-KEY		
2	1. SRC for Record 2. Subfields: F-SRC-P F-SRC-U	F-SRC		2-8
2.1	1. Part of Key 2. Contains first 5 digits of SRC 3. Packed Decimal 4. VALUES: 00000 to 99998 NOTE: 99999 mark a dummy EOF record	F-SRC-P	N 5 digits Comp-3	2-4
2.2	1. Part of Key 2. Contains last 4 characters of SRC NOTE: ZZZZ marks dummy EOF record Sub-fields: F-SERIES F-YEAR F-VAR	F-SRC-U	A/N 4 Char	5-8
2.21	1. Series	F-SERIES	A/N 1 Char	5
2.22	1. Year	F-YEAR	A/N 1 Char	6
2.23	1. Variation	F-VAR	A/N 2 Char	7-8

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RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER	NUMBER OF PAGES	
		DATE		
SYSTEM ID TOE		RECORD LENGTH 74	PREPARED BY LT CORDES	
CAFL <u>DISK</u> TAPE OTHER			FILE ID	
REC PER BLK 22	REMARKS		F REC	
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
3	1. Remark Number for record 2. Part of Key 3. Packed decimal	F-REMK-NO-P	N 3 digit Comp-3	9-10
4	1. Alpha Sequence 2. Part of Key 3. Indicates sequence of lines within a remark 4. VALUES: A-Z NOTE: A = 1st line of remark B = 2nd line of remark = last line of remark	ALPHA-SEQ	A/N 1 Char	11
5	1. Part of Key 2. Change Number 3. VALUE: 00-99	F-CHG-NO	N 2 Char	12-13
6	1. Published or process file 2. VALUE: "1" = Published TOE "2" = In-Process TOE	F-PUB-PROC	N 1 digit	14
7	1. Record classification 2. VALUE: C = Confidential U = Unclassified	F-CLASSIF	A/N 1 Char	15
8	1. Indicates whether or not an unpublished change is applied against the record 2. VALUES = Space - No unpub change 1 - Unpub Change	F-UNPUB-CHG	A/N 1 Char	16

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RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.		PAGE NUMBER 3	NUMBER OF PAGES 1	
		DATE		
SYSTEM ID TOE	RECORD LENGTH 74	PREPARED BY LT CORDES		
CARD DISK TAPE OTHER	FILE ID F FILE			
REC PER BLK 22	REMARKS		F REC	
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
9	1. Contains Remark	REMK-LINE	A/N	17-71
	2. VALUES: Any A/N Character		55 Char	
10	1. Filler	FILLER	A/N	72-74
			3 bytes	

RECORD LAYOUT For use of this form, see AR 18-7; the proponent agency is Office of the Assistant Vice Chief of Staff.			PAGE NUMBER 1	NUMBER OF PAGES 1
SYSTEM ID TOE			RECORD LENGTH 70	PREPARED BY LT DIVECCIO
CARD	DISK	TAPE	OTHER	FILE ID N FILE
REC PER BLK	REMARKS			
RELATIVE POSITION	IDENTIFICATION OF ELEMENT (Field)	ABBREVIATION	LENGTH/ CLASS	LOCATION
1	1. Delete Code VALUES: high-Values = Deleted Record	N-DELETE	1 Char A/N	1
2	1. Genetis Nomenclature	NOMEN	64 Char A/N	2-65
3	1. Indicates whether or not the LIN is a PEMA item VALUES: 1 = PEMA-ITEM 0 = Not a PEMA ITEM	PEMA-ITEM	1 Char A/N	66
4	1. Indicates whether or not a BOI is pending against that LIN VALUES: 1= BOI Pending	N-BOI-PEND	1 Char A/N	67
5	1. Type Classification VALUES: A = Type class A Lin B = Type class B Lin	TYPE-CLASS	1 Char A/N	68
6	1. Filler	FILLER-N	2 Char A/N	69-70

SAMPLE FORMAT FOR CONTROL
AND STATUS REPORTING SYSTEM
APPENDIX N
QUALITY IMPROVEMENT OF THE
TOE SYSTEM (U)
PHASE II

WEEKLY STATUS REPORT AS OF 24MAR72

SRC	TYPE ACTION	PROP ACCY	WORK SHEET CARD-LOCK DISTRIBUTED	DETOE DUE	PTOE DISTRIBUTED FOR REPRO	PTOE DISTRIBUTED DA/DOI	APPROVAL/COMMENTS RCD	DA	CONARC	ANC	DISTRIBUTED TO TAG	REMARKS
51174	NR	NSA	3000071 1500071	3100071 1300071	1500071 1500071	31DEC71 30DEC71	29FEB72 14FEB72			29FEB72 21JAN72	83JAN72	1
17108	NS	ARMA	3000071 1500071	3100071 21AC071	1500071 0900071	30SEP71 12NOV71	30NOV71 25DEC71			30NOV71 01DEC71	*25FEB72	1
16404	NR	FAA	3100071 1700071	3000071 11NOV71	15JAN72 17FEB72	31JAN72 03MAR72	31MAR72			31MAR72 19JAN72	30MAR72	
55502	NR	TA	3100071 0200071	3000071 17DEC71	15FEB72 13JAN72	*29FEB72 07FEB72	30AER72 15MAR72			30AER72 14FEB72	31MAR72	1

REMARKS CODE:

1. TAG date slipped due to PTOE approval/mts being returned late by DA/CONARC/AMC.
2. PTOE dispatched late to DA/DOI due to reproduction problems/work priorities in PEO Er, Dir of Personnel.
3. 18 Return for Final TAG Copy.
4. 30 Return for Final TAG Copy.
5. 4th Return for Final TAG Copy.

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best available copy.

Automated Status Reporting System

1. On page N-2 is the format for an automated status reporting system. The top line for each SRC reflects the scheduled date the action should occur. The second line represents the date the action was completed.
2. There are two sets of dates the Organization Directorate of HQ, USACDC has little control over. Exceeding the programmed date will normally result in a requirement to reprogram the action. These dates are:
 - a. Time required to reproduce and distribute plan TOE for DA/AOI review. Maximum of two weeks is allocated.
 - b. Time required for DA, CONARC and AMC to review and return the applicable comments/approval to CDC. Thirty days is allocated for this step. If it exceeds it CDC will adjust the TAG due date to reflect a date 60 days after the last comments are received. This is done in accordance with CDCDO-OF Ltr, 3 Dec 69, Extension of TAG Due Dates with 1st Ind, FOR OT OM TO, dtd 11 Dec 69.
3. When the single change system becomes operational on 1 July 1972 approved changes will be entered on the transaction file upon receipt of DA approval and resolution of any CONARC or AMC comments. The date the semi-annual change is scheduled to go to TAG will be entered in the Distributed to TAG column.
4. This report will be updated as of close of business each Friday. Copies of the report will be furnished initially to the Dir of Org, Ch, O&E Division and O&E Division Branch Chiefs. As actions are completed the line of data will be transferred to the historical file.
5. The remarks codes are explained by the legend at the bottom of the printout.

WEEKLY STATUS REPORT AS OF 24MAR72

SAC	TYPE ACTION	PROP ACCY	WORK SHEET CARD-LOCK DUE	PTOE DISTRIBUTED FOR REPRO	PTOE DISTRIBUTED DA/DOI	APPROVAL/COMMENTS RCD	DA	CONARC	AMC	DISTRIBUTED TO TAG	REMARKS
51174	NR	NSA	30JUN71 31JUN71 15JUN71 15JUN71	15DEC71 15DEC71	31DEC71 30DEC71	29FEB72		29FEB72 14FEB72	29FEB72 21JUN72	*30MAR72	1
51175	NR	ARMA	30JUN71 31JUN71 15JUN71 15JUN71	15DEC71 15DEC71	30SEP71 12NOV71	30NOV71 29DEC71		30NOV71 21JAN72	30NOV71 0 1JUN71	*29FEB72	1
51176	NR	FAA	31JUN71 31JUN71 17JUN71 17JUN71	15JAN72 17FEB72	31JAN72 03MAR72	31MAR72		31MAR72	31JUN72 15JUN72	30MAR72	
55504	NR	TA	21JUN71 30JUN71 02JUN71 17JUN71	15FEB72 13JAN72	*20FEB72 07FEB72	30APR72 15MAR72		30APR72 09MAR72	30APR72 1-7FEB72	31MAR72	1

REMARKS CODE:

1. TAG date slipped due to PTOE approval/ents being returned late by DA/CONARC/AMC.
2. PTOE dispatched late to DA/DOI due to reproduction problems/work priorities in TAG Br, Dir of Personnel.
3. 1d Rerun for Final TAG Copy.
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