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SPECIAL REGULATIONS  
No. 705-5-1

DEPARTMENT OF THE ARMY  
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RESEARCH AND DEVELOPMENT OF MATÉRIEL  
RESEARCH AND DEVELOPMENT, TYPE CLASSIFICATION, AND  
MODIFICATION OF MATÉRIEL

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SECTION I  
GENERAL

Paragraph

General

1. General.—a. Research and development functions extend from the inception of ideas to their final embodiment in all types of matériel techniques, methods, and processes. These functions also include—
- (1) Investigations and exploratory studies necessary to establish scientific and technical data during research and development and to determine necessity for and feasibility of further research and development.
  - (2) Actions related to such subsequent modifications of matériel as would materially affect the technique of its employment.
  - (3) The administrative functions which support research and development as their primary mission.
- b. Research is a continuous process of scientific investigation to discover and establish new scientific facts, techniques, and physical laws. It is not usually related to specific types of matériel; however, impetus may be provided, or direction received from demonstrated or suspected possibilities for new types of matériel or techniques.
- c. Development is the application of the known scientific facts, techniques, materials, and physical laws to the creation of new or improved matériel or methods for military use.

<sup>1</sup>These regulations supersede sections I and II, AR 856-25, 20 June 1943; WD Circular 126, 1943, as amended by paragraph 2, section I, DA Circular 231, 1943; section VI, DA Circular 77, 1946; Memorandum 700-5-24, 30 November 1948; Memorandum 850-25-4, 3 September 1946; Memorandum 854-25-10, 30 September 1947; and Memorandum 850-25-14, 8 November 1946.

d. Owing to the specialized nature and scope of responsibilities and operating procedures of Department of the Army agencies concerned, and in the interest of providing the greatest possible latitude to research and development within the over-all Department of the Army program, and the plans of the Research and Development Board, only those references to responsibility and procedure are delineated which are necessary to insure progress, coordination, and efficient conduct of the approved program. Within these terms the agencies concerned will work out their detailed procedures as best fit their special situations except as may be specified, when necessary, by subsequent Department of the Army instructions.

e. When used in these regulations, the term—

- (1) "Technical services" means the Chemical Corps, the Corps of Engineers, the Medical Department, the Ordnance Department, the Quartermaster Corps, the Signal Corps, and the Transportation Corps.
- (2) "Services" includes the administrative and technical services.
- (3) "Developing agencies" includes the technical services and any other Army agency doing research and development work.
- (4) "Agencies" includes the Office, Chief, Army Field Forces (representing the ZI, armies); the Headquarters, Department of the Army (to include "services" and representing oversea commands); the United States Navy; the United States Air Force; and the Research and Development Board.
- (5) "Using agencies" includes any of the above elements having command or service functions, and requiring matériel for use in performance of its mission.

f. For policies and procedures concerning the safeguarding of all information relative to the research, development, test, and technical details of items of matériel, see AR 380-3.

## SECTION II

### RESPONSIBILITIES OF AGENCIES CONCERNED WITH RESEARCH, DEVELOPMENT, AND TYPE CLASSIFICATION OF MATÉRIEL

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and scope of responsibilities of the Army agencies concerning the greatest possible latitude of the over-all Department of the Research and Development Board, and procedure are delineated, and coordination, and efficient within these terms the agencies should procedures as best fit their circumstances, when necessary, by sub-sections.

Chemical Corps, the Corps of Engineers, the Ordnance Department, the Signal Corps, and the

Administrative and technical services

and the technical services and research and development

Chief, Army Field Forces, the Headquarters, Department of the Army, and representing overseas commands of the United States Air Force, the United States Navy, and the United States Development Board.

of the above elements having direct interest and requiring matériel for use

in the safeguarding of all research and development, test, and technical

## AGENCIES CONCERNED WITH AND TYPE CLASSIFICATION

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2. **General authority and responsibility.**—For general authority and responsibility of Department of the Army agencies, special task forces, and oversea commands, see appropriate Department of the Army publications on organization and functions.

3. **Chief, Army Field Forces.**—The Chief, Army Field Forces, is responsible for—

a. The preparation of recommended military characteristics for matériel used or intended for use by a field army.

b. The initiation of requests for the development of matériel, in conformity with approved military characteristics thereof, for units of a field army.

c. The recommendation for cancellation or amendment of military characteristics when appropriate for matériel intended for use by a field army.

d. The coordination with the chiefs of developing agencies of military characteristics for matériel used by units of those agencies assigned to a field army.

e. The preparation of a recommended basis of issue for items of matériel for units assigned to a field army.

f. The coordination and supervision of tests of matériel used exclusively by a field army, and for joint or separate coordination and supervision of tests of matériel used in common with other agencies.

g. The initiation of requests to the chiefs of the developing agencies for the classification as to type of matériel used by a field army.

h. The performance, where applicable, of those functions enumerated above which pertain to matériel developed by the Air Force and by the Navy, in which a field army has a direct interest.

4. **Chiefs of developing agencies.**—The chief of each developing agency is responsible for—

a. The preparation and conduct, in accordance with the over-all plan furnished by the General Staff, United States Army, of a research and development program covering matériel, methods, and techniques for which he has research and development responsibility.

b. The preparation of recommended military characteristics for matériel used or to be used by units of his agency.

c. The coordination with the using agencies concerned of the military characteristics of matériel for units of his agency assigned to such using agencies.

d. The coordination with the using agencies concerned of all development projects for matériel to be used by those agencies.

e. The initiation of requests for research and development of these

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items which are the responsibility of other developing agencies, but which support his own development activities.

*f.* The conduct and supervision of tests of matériel used exclusively by his agency, and for joint or separate supervision of tests of matériel used jointly with other agencies.

*g.* The preparation of type classification actions on matériel for which he has research and development responsibility.

*h.* The initiation of requests to other developing agencies for the classification as to type of matériel developed by other agencies and used by his agency.

*i.* Preparation of a recommended basis of issue for items of matériel for units assigned to his agency.

*j.* The establishment of a basis of issue for non-T/A and non-T/O & E crypto-equipment for all units of the Army. (The Chief, Army Security Agency, only.)

*k.* The maintenance and publication of records (book of standards or similar lists) in which are listed all adopted items, by type classification of matériel for which his agency has storage and issue responsibility. (Since books of standards or similar lists are used as the basic source for including items in the proper technical service equipment sections of T/O & E, EML, T/A, and similar Department of the Army publications, action will be taken by all concerned to insure that identical items, particularly components of assemblages that are also separate items of issue, will be listed in the book of standards or similar list of only one developing agency.)

**5. Technical committees.**—The chief of each developing agency will establish and maintain a technical committee to effect coordination among the developing and using agencies during research, development, test, type classification, and procurement activities. Each technical committee will act in an advisory capacity to the chief of the parent agency and will consider and report upon such technical matters as he may refer to it. The technical committee system will be utilized as a means of obtaining expeditious consideration of the interests of all agencies of the Department of the Army, including General Staff, United States Army, in accordance with their assigned authority and responsibilities, with the minimum channelizing of routine and detailed communications, and for establishing a unified system for recording research, development, and classification activities.

*a.* Each technical committee will consist of members from the parent agency and—

- (1) *Representatives from other developing and using agencies as designated by the heads thereof, and representatives of the other Departments of the National Military Establishment as desired by the heads of those Departments.*—The representatives of these other agencies will participate in technical committee meetings at which subjects of interest to their agencies are considered. The participation of representatives of the other Departments of the National Military Establishment may be as full members on actions involving projects of joint interest or involving common use matériel.
- (2) *Representatives from the General Staff, United States Army.*—The purposes of this participation are to reduce the necessity of channelizing individual and detailed actions through the General Staff and to provide guidance and unity of action at the operating level on Department of the Army policy and over-all programming of activities. Representatives speak for the Chief of Staff or the Secretary of the Army on matters of primary General Staff responsibility as outlined in appropriate Department of the Army publications on organization and functions. Approval of a committee recommendation by these representatives will constitute General Staff approval. A General Staff representative will withhold approval if any other agency submits a minority opinion. If a General Staff representative does not approve a committee recommendation, the recommendation is either withdrawn for further study by the submitting agency or the report is forwarded in the normal manner to the General Staff for decision. Disagreements on interdepartmental matters which cannot be resolved on the department level will be referred to the Research and Development Board or other appropriate joint agency for decision.

b. Technical committee action will include establishment of technical requirements and approval of military characteristics and revisions thereof (based on recommendations of the using agency), establishment of projects, assignment of project title and Army project number, assignment of project priorities in accordance with current Department of the Army instructions, recording of item name on adopted types, classification of matériel as to type, cancellation of established projects, recording of current security classification of matériel, authorization of procurement for test purposes, and processing of procurement programs for major items in accordance with current Department of the Army directives on this subject.

c. The designation of the methods of operation, such as delegation by the technical committees of responsibilities to subcommittees thereof, or other administrative or procedural matters, is the responsibility of the chief of the parent agency. However, certain activities of the technical committees may be coordinated by the General Staff, United States Army, in order to achieve the maximum degree of uniformity consistent with efficient operation among the several committees. The Chief, Army Security Agency, will establish such procedures as will protect the special security requirements for crypto-equipment.

d. Information copies of actions proposed for inclusion in the agenda of a technical committee meeting will be delivered to the designated representatives at least ten working days in advance of the meeting. Only in cases of extreme urgency will items be presented at a technical committee meeting that have not been in circulation for coordination at least ten working days.

e. The minutes of meetings of the technical committee will show in addition to the names of those present and participating in the actions taken, concurrences indicated outside the meeting by interested agencies, and any minority reports.

f. The signature or concurrence of any agency representative to a formal report of a technical committee on a matter of interest to his agency signifies concurrence of his agency in that proposed action. Nonparticipation by a committee member (after he has been given due notice and opportunity to participate) will indicate that his agency has no interest in the matters to be acted upon and that approval by the agency he represents will not be required. Nonconcurrency will be indicated only by the filing of a minority report.

g. In the event that there is disagreement in committee action on a matter before the committee, the chief of the parent agency may withdraw the matter and attempt to resolve the difference by direct, expeditious, and informal contact with the chief of the other agency or agencies concerned. In the event agreement is secured, the report will be referred back to the technical committee for record of agreement. In the event agreement cannot be secured, the chief of the parent agency will refer the complete report, with minority reports, together with his recommendations, to the General Staff, United States Army, for decision. Technical committee action is not considered as final on an item requiring approval by higher authority until approval by the General Staff, United States Army, has been granted.

SECTION III  
PROCEDURES GOVERNING RESEARCH AND  
DEVELOPMENT

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6. Initiation and approval of military characteristics.—a. The term "military characteristics" is defined as those qualities of an item or of an assemblage required to fulfill a specific military purpose. A statement of military characteristics will normally be prepared for—

- (1) Matériel which will require a basis of issue in an approved T/O & R, EML, Day of Supply, T/A, or other Department of the Army publication.
- (2) Matériel which will require spare parts, except components of assemblages.
- (3) Class V supplies, and class IV supplies, except commercial construction materials.

b. A statement of proposed military characteristics for a required item of matériel may be initiated by any unit or individual in the Army. All commands will encourage submission of such statements and of constructive criticisms of matériel and techniques, even if fragmentary in nature, for consideration by appropriate Department of the Army agencies.

c. A statement of military characteristics may be drawn up without a definite idea of how an item can be produced or formulated to comply with the stated characteristics, or a statement of characteristics may result from a realization that some specific device may be utilized to advantage by the Army. The basic purpose of a statement of military characteristics is to define the capabilities that the item should possess irrespective of whether an item is developed for the purpose or a suitable commercial item can be found. The statement, therefore, pertains also to general operating characteristics not uniquely "military." In stating military characteristics, and throughout the procedure of providing matériel in conformity therewith, every effort will be made to broaden the basis of the desired characteristics so that the maximum use may be made of commercially

available items. The greatest latitude will be permitted the developing agency in meeting stated military characteristics. Military characteristics should state only the result desired and should not attempt to state how the result is to be obtained. Recommendations as to technical details may be exchanged through appropriate liaison channels between the developing and using agencies throughout development of the matériel.

*d.* When a category of items in common commercial use is considered by a using agency as essentially satisfactory for a particular need of that agency, the statement of military characteristics will be such as to require the least amount of modification of such items consistent with performance required.

*e.* In the preparation of military characteristics for a new or improved item, a statement will be included as to whether air transportability, in whole or in part, is required or desired, and in what phase of airborne operations the item is expected to be used. In no case will air transportability requirements be permitted to impair materially essential battlefield characteristics. For further details on this subject as well as related subjects affecting military characteristics such as temperature limitations and radio noise suppression, see pertinent Department of the Army publications.

*f.* Any agency of the Department of the Army may submit to the appropriate using agency, recommended military characteristics for any type of Army matériel. The fact that a using agency is responsible for recommending military characteristics of matériel used by elements of its own command is not to be interpreted as limiting the inherent right of any other agency to submit to the using agency for full consideration the desired military characteristics of matériel which this other agency considers essential in support of its assigned mission.

*g.* A statement of military characteristics for an item of matériel required by more than one using agency should be coordinated among those using agencies prior to submission by one of those agencies to a developing agency. When such coordination results in written concurrences by other using agencies, such written concurrences will be accepted by the technical committee. In event such prior coordination does not resolve differences among those using agencies, the statement of military characteristics will be submitted by the initiating using agency to the developing agency, and the appropriate technical committee will act on the statement of military characteristics by the same procedure as it acts on other matters brought to its attention.

*h.* An agency formulating a statement of military characteristics

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from the standpoint of development of a desired item of matériel should be sufficiently advised on the technical aspects (usually by prior consultation with the developing agency) to determine with reasonable certainty that the item for which the statement is to be written will fully utilize the latest expected advances in science with due consideration of current industrial techniques and potential capacity for production necessary to meet quantity requirements.

i. All statements of recommended military characteristics, and revisions thereof, for items of matériel will be formulated by the using agency and submitted through channels to the appropriate developing agency for coordination and technical committee action. Only such action will be taken by the General Staff, United States Army, on statements of military characteristics at this stage of procedure to insure that the statements are coordinated with similar statements initiated by other agencies, and that they are referred to the developing agency having the appropriate research and development responsibility for the proposed item. This action by the General Staff, United States Army, does not necessarily constitute approval of the substance of the statement, nor a directive to establish a research and development project in accordance therewith. When the using agency is also the developing agency, the statement may be referred direct to the technical committee.

j. Technical requirements and military characteristics for matériel for which other Departments of the National Military Establishment have research and development responsibility will be submitted by the using agency to the General Staff, United States Army, for coordination. Those approved requests will be submitted as Army requirements to the appropriate Department with a recommendation as to the appropriate priority of prosecution to meet Army needs.

**7. Initiation and approval of research and development projects.—a.** A research and development project is a specifically defined task within a research and development field, which is established to meet a single military requirement, either stated or anticipated, for research data, an end item of matériel, a major component, or a technique. Parallel tasks whose objectives are identical or the development of component parts of an end item of matériel may be grouped in a single project. However, tasks which are undertaken to meet separate military requirements will be considered as separate projects. Projects will usually require both research and development activity, and also a certain amount of administrative activity chargeable either direct to the project or to research and development overhead. All projects will be numbered in accordance with the Department of the

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Army index and classification system for research and development projects.

b. A project may be established as a result of indicated need for a new or improved item of matériel, for which a statement of military characteristics has been submitted in accordance with procedures outlined in paragraph 6. The chief of a developing agency receiving statements of military characteristics for desired types of matériel will refer them to his technical committee for action.

★ c. A project may be established as a result of indicated need for background, exploratory, basic, or applied research necessary to the over-all research and development program of the developing agency. These include investigations into natural laws, ways of improving matériel, and new applications of scientific principles, to matériel, methods of techniques. Since these projects usually arise independently of the using agencies, the procedures for establishing military characteristics will not generally apply. However, in lieu of military characteristics, a description of the objectives of the project, such as physical properties and limits of tolerances will be included to serve as a guide in attaining the research goal. Since such projects are of immediate collateral interest to the other developing agencies and are of broad importance to the future research and development program of the Army, they will be referred by the chief of the developing agency to his technical committee for action.

d. Research and development activity may be initiated as a result of indicated need for developing methods, techniques, and apparatus for research, development, or testing; for development leading to desirable modifications of adopted matériel, or for development of improved components of end items when such modifications and improvements do not change established military characteristics of separate end items; for preliminary investigations to determine the desirability and feasibility of initiating a development project; and for administration incident to research and development which cannot be properly chargeable to any single established project. These activities, to be known as service projects, will not normally be of interest to agencies other than the developing agency in which they originate, and, when such is the case, do not require technical committee action but will be read for record. Where no objection is raised to the recording of such activities by the technical committee, they will be considered as approved projects. The priority rating for such projects will be assigned by the developing agency concerned but will be subject to review at the time the project is read for record and in all subsequent periodic project reviews.

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e. All research and development projects and activities, whether or not requiring technical committee action, will be recorded in technical committee records as expeditiously as possible and no project will be considered as approved unless so recorded. Service projects of an administrative nature may be appropriately grouped for this purpose. Expenditure by developing agencies of research and development funds is limited to projects and activities so recorded.

f. In considering the advisability and feasibility of establishing research and development projects, all agencies concerned will give full consideration to the need for concentrating available funds, facilities, and personnel on research and development of new and radically improved matériel and techniques rather than in dissipating effort on minor engineering changes to existing types. Exceptions to this policy are when such changes are essential to combat readiness, when they will contribute substantially to scientific and technical knowledge of military value, when necessary as stated in paragraph 18, and when substantial savings can be anticipated from current appropriations by improvement of existing types.

g. The technical committee report for the adoption of military characteristics, the initiation of a research and development project, and/or authorization for procurement of development type items will contain such of the following information as is pertinent:

- (1) Agencies concerned (proposed using agencies).
- (2) Requirement and/or justification for the research or item to be developed.
- (3) Brief of project, objective and/or military characteristics.
- (4) Related projects and/or matériel.
- (5) *Proposed development.*
  - (a) Justification of proposed priority.
  - (b) Anticipated dates of initiation and completion of work on project.
  - (c) Estimated cost of project by fiscal year.
  - (d) Plan of action in conducting the project.
  - (e) Quantity of test models to be provided, date they are anticipated, and by whom to be tested. (This may be furnished by separate action at the conclusion of engineering tests, if not known when project is initiated.)
- (6) Security classification.
- (7) Recommendations will include—
  - (a) Project title and project number.
  - (b) Action desired on the project such as authority to initiate.
  - (c) Priority to be assigned the project.

- (d) Name of the item on which action is desired.
- (e) Action desired on the item, such as adoption of military characteristics or authorization for procurement of a development type.

8. Conduct of research and development projects.—*a.* It is most essential in all stages of development work that adaptability of the item to quantity production and its effect on strategic and critical materials be considered as among the most important requirements of the design. Research and development programs should not be restricted in the use of strategic and critical materials. When strategic and critical materials are included in a primary design, consideration must be given to the possible or probable necessity for substituting noncritical or less critical materials. Alternate designs or specifications should, if practicable, be provided for items wherever it develops that supply of any material in question cannot be made available for war production.

*b.* In addition, standard component parts will be used wherever possible to assure ease in replacement, stocking, issue, and maintenance of parts. For these reasons commercial items will be adopted or adapted with the fewest practicable modifications, whenever such procedures will satisfy military requirements. The using agency which recommends the military characteristics will be afforded the earliest opportunity by the developing agency to analyze, from the point of view of technique of employment, the feasibility of such adoption of adapted commercial items.

*c.* During the period an item of matériel is under development, close liaison will be maintained between the using agency and the developing agency in order to insure that the completed item will meet desired military characteristics. Any tendency to insulate the ultimate user from knowledge of technical problems involved in research and development contributes to inflexibility of the entire system of attempting to meet his needs expressed in terms of desired military characteristics. Close liaison will also be maintained by the Army using agencies with the developing agencies of other departments of the National Military Establishment on projects of interest to the Army.

9. Development tests.—Matériel is normally subjected to two types of tests and, under certain circumstances, to three types of tests, before classification as an adopted type. These tests are defined as follows:

*a. Engineering tests.*—Engineering tests will comprise those examinations, investigations, or other observations necessary to determine the technical adequacy of the matériel undergoing test. Engineering

tests will be conducted during development of

*b. User (service) tests.*—The suitability of the matériel is necessary to enter the event that the responsibility for the particular item is delegated to one of the General Staff.

*c. Troop tests.*—The item of matériel is used by the troop. However, for even necessary service use, by

10. Conduct of tests.—Tests should be sufficient to determine characteristics and such data in order to send representative to be believed to have to maintenance materiel, engine field stations such overseas States Army

*b. User (service) tests.*—The delay in development should begin as early as sufficient per use. Close contact with the test with the duplication of tests, including to gaining confidence when necessary through or conduct of the National suitability of

tests will be conducted by the developing agency charged with the development of the item of matériel.

*b. User (service) tests.*—User (service) tests are tests of development matériel normally conducted by a using agency to determine the suitability of the matériel for service use. In some cases it may be necessary to extend a controlled test over a specified period of time. In the event that there are two or more using agencies of the matériel, the responsibility for conducting and supervising the test for a particular item or group of items may be jointly assumed or may be delegated to one agency, as agreed by the using agencies, or as directed by the General Staff, United States Army.

*c. Troop tests.*—In most cases it will be practicable to classify an item of matériel as an adopted item as a result of the preceding tests. However, for some items of matériel, it may be highly desirable or even necessary to conduct a troop test to determine its suitability for service use, by issuing the item to equip designated units.

**10. Conduct of test.**—*a. Engineering tests.*—Engineering tests should be sufficiently extensive to determine essential engineering characteristics and data in order to avoid the necessity of determining such data in user (service) tests. Using agencies will be invited to send representatives to witness engineering tests in which they are believed to have an interest. To be sufficiently definitive with regard to maintenance and technical suitability for operation in various climates, engineering tests may be conducted at such proving grounds or field stations within the continental limits of the United States or in such oversea commands as are approved by the General Staff, United States Army.

*b. User (service) tests.*—In order that there may be a minimum of delay in development and final adoption, user (service) tests will begin as early as practicable and will be carried on intensively over a sufficient period to determine the suitability of the item for service use. Close contact will be maintained by the agency conducting the test with the developing agency concerned, in order to minimize the duplication of tests. The developing agency may send representatives, including technical assistants, to observe the tests with a view to gaining first-hand knowledge of the results and to render assistance when needed in the conduct of the tests. The Army using agencies through liaison or formal correspondence will arrange to witness or conduct tests of matériel under development by other departments of the National Military Establishment in order to determine the suitability of such matériel for Army use.



*d. Other tests.*—Tests conducted primarily for the purpose of establishing tactical doctrine, subject matter for inclusion in training publications, or production data prior to adoption will be conducted by the developing or using agencies as necessary. As far as practicable, tests of this nature will be combined with engineering and user (service) tests. If ammunition or any other expendable supplies, in excess of that available to the developing agency for use in engineering and user (service) tests, is required for such tests, it will be procured through request to the appropriate supply agency.

11. Use of troops and facilities of the armies.—*a.* For tests of items of matériel in which units of a field Army have primary interest as the users, and for items of Army-wide use—

- (1) The Chief, Army Field Forces, will formulate and coordinate the test plans in conjunction with the developing agencies and the armies concerned; will initiate and supervise the conduct of the test and will consolidate, review, and evaluate the results of the test.
- (2) The army commander will furnish personnel and facilities as required in the test plan; and will conduct the test in accordance with the test plan.
- (3) The chiefs of the developing agencies will supply the necessary matériel at the appropriate test sites; will furnish technical information necessary to the conduct of the test; will furnish necessary technical personnel to assist the Chief, Army Field Forces, in the supervision of the test, and the army commander concerned in the conduct of the test; and will otherwise comply with the provisions of the test plan.

*b.* For tests of items of matériel in which units of a developing agency have primary interest as users, the chiefs of the developing agency concerned will assume the responsibilities assigned in *a*(1) above.

*c.* The test plan will be coordinated, if necessary, with other agencies of the National Military Establishment by the General Staff, United States Army. The agencies concerned will communicate direct for the purpose of coordination and conduct of the tests. Differences among the participating agencies will be presented to the General Staff for resolution.

12. Review of research and development projects.—Chiefs of developing agencies will direct timely and periodic reviews of research and development projects by their technical committees to assure conformity with the Department of the Army research and development program and to eliminate unproductive and duplicating activities.

## SECTION IV

PROCEDURES GOVERNING TYPE CLASSIFICATION OF  
MATÉRIEL

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13. Classification of matériel as to type.—For the purpose of recording the status of items of matériel from the standpoint of development and suitability for service use, items are classified by appropriate technical committee action as follows:

a. "Development type" is used to designate an item being developed to meet a military requirement.

b. "Adopted type" is the category of matériel which is suitable for its intended military purpose. For record purposes, this category is classified as follows:

- (1) "Standard type" is used to designate the most advanced and satisfactory item that has been adopted and is preferred for procurement. There normally will be only one standard type for each requirement.
- (2) "Substitute standard type" is used to designate an item which is not as satisfactory as a standard type, but is a usable substitute therefor, and may be procured to supplement the supply of the standard type.
- (3) "Limited standard type" is used to designate an item which is not as satisfactory as a standard type, but is a usable substitute therefor, and is either in use or available for issue to meet supply demands. It may be peculiarly suitable for training purposes in lieu of standard or substitute standard types; and when so used exclusively it will not be listed as an asset in the Army supply program. Unless otherwise specifically indicated, a limited standard item is used in lieu of a standard item until the supply of the limited standard item is exhausted; however, at the discretion of the agency charged with its procurement, stocks of limited standard items may be disposed of through other means when advisable, based on availability of more suitable type. Additional complete major units will not be procured, but component parts and accessories may be procured if necessary to maintain the complete major units in serviceable condition throughout a reasonable life expectancy.

*c. "Obsolete type."*—An obsolete type of matériel is one which has been declared unsuitable for military use or for training purposes. Obsolete items will not be issued to troops, and will be disposed of at the earliest practicable date by the chief of the responsible agency in accordance with existing instructions, except in those special cases where they are to be retained for special requirements outside of the established Army supply program. Where the development and procurement status of new types make such action desirable, the chief of the responsible developing agency will declare items obsolete. This action will be subject to the concurrence of the using agencies concerned, and to approval by the General Staff, United States Army, and will be processed through technical committee channels. Timely action will be taken leading to classification of matériel as obsolete, and to disposal of such items, in order that valuable storage space and maintenance funds are not wasted on useless matériel.

**14. Matériel to be classified.**—*a.* All end items of supply included under paragraph 6a will be classified as to type in accordance with the provisions of these regulations. Whenever the characteristics of an improved or modified item are sufficiently different from those of the item being superseded or supplemented so as to necessitate maintenance of separate stocks, the item concerned will be processed for appropriate classification. The stock position of adopted items of matériel will not in itself delay or limit research and development activities necessary to the prosecution of research and development programs.

*b.* An item of matériel classified as to type by a developing agency will not upon transfer of responsibility to another developing agency be processed through the technical committee of the recipient agency as an action item unless concurrent reclassification action is indicated with the transfer. The transfer of responsibility will be read for record by the technical committee of the recipient developing agency but any supply action required will not be delayed pending such recording.

*c.* An item which has been classified as one of the former commercial types will be reclassified to the appropriate type as a read-for-record item by the technical committee.

*d.* Army using agencies will submit recommendations to the General Staff, United States Army, as to classification action desired on items developed by other Departments of the National Military Establishment for Army use. Those approved recommendations will be referred to the appropriate Department for classification action.

CLASSIFICATION OF

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15. Approval of classification as to type.—*a.* When it becomes evident that classification or reclassification of an item of matériel is desirable, appropriate recommendations will be formulated by the using or developing agency and submitted for action through technical committee channels. When, as a result of this coordination, the recommendations for classification are not concurred in because of a minority report in technical committee action, or because of non-concurrence by the chief of the developing agency, the recommendations, together with any reports pertaining thereto, will be forwarded to the General Staff, United States Army, for decision.

*b.* The classification or reclassification as to type of assemblages of matériel also includes the classification or reclassification of the component parts, except that the reclassification action will not lower the type classification of components that also are included in other assemblages or matériel bearing a higher type classification, or those items that are also separate items of issue. Separate formal type classification of a component part of an adopted assemblage is not necessary for the purpose of including the component part as a separate item in tables of organization and equipment, equipment modification lists, tables of allowances or other Department of the Army publications. Classification as an obsolete type of an assemblage containing an item or items separately issued, or the deletion of such items from the parent assemblage, will necessitate individual classification action for the items affected.

*c.* The type classification action of a new item replacing an existing item will include consideration of the reclassification of the item to be replaced. A standard item being replaced will be concurrently reclassified.

*d.* Classification as a development type is automatically approved when the research and development project pertaining thereto is approved according to the provisions of these regulations.

*e.* Technical committees will furnish such of the following information as is pertinent with each request for type classification of matériel for use by the Army:

(1) Discussion concerning—

- (a) Agencies concerned (proposed using agencies).
- (b) Purpose of item.
- (c) Description.
- (d) Related matériel.

1. Matériel used in conjunction with the item.

2. Nature of improvement of item over existing matériel for same or similar purposes.

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3. Existing items which must be modified and new items which must be classified before issue of the item can be accomplished.
4. The stock status of item being replaced or superseded, the advisability of complete replacement by the new item, and the recommended objective data.
- (e) Development history and status.
- (f) Whether item is—
1. New type.
  2. Improvement, replacement, or supplement to an existing classified type.
- (2) Pertinent data will be indicated as follows:
- (a) Expendability.
  - (b) Estimated unit cost in quantity procurement, and comparison with cost of the item being replaced.
  - (c) Whether the item meets all approved military characteristics, and if not, in what respects it is lacking.
  - (d) Number of units procured, on hand, and on outstanding contracts.
  - (e) Whether the item is intended for immediate procurement, future procurement, or as funds become available.
  - (f) Availability of funds (if intended for immediate procurement).
  - (g) Whether sufficient facilities exist for peacetime and wartime production. Data will indicate whether the characteristics of the item are such as to restrict its procurement to one source of supply, whether production by Government facilities only is contemplated, and whether procurement of the item will complicate or interfere with the procurement of other items already classified.
  - (h) Whether the design insures maximum interchangeability of parts and is suitable for mass production. Whether this information is based on a specific procurement planning study or a specific study of producibility.
  - (i) What strategic and critical materials in significant quantities are required based on current lists published by Strategic Materials Committee, Munitions Board, whether maximum practicable use of nonstrategic and noncritical domestic materials has been accomplished, and whether alternate designs have been prepared utilizing noncritical and nonstrategic materials.

- (j) Any special steps necessary to train specialists in use of the item or to implement training of using troops, and number and types of specialists required to operate or use the item.
- (k) Whether training and maintenance literature for the item is available, in preparation, or will be required.
- (l) Security classification.
- (m) Whether or not the item is air transportable, either intact or in dismantled units; in what phase of operations it will be transported by air; statement that the item complies with current directives on air transportability; and a statement that the tie-down points are satisfactory and that a description of these tie-down points will be included in pertinent manuals.
- (3) Recommendations will include—
- Item name.
  - Particular classification desired (with present classification).
  - If replacing or supplementing an adopted item, recommendation as to type classification of that item.
  - The closing or continuance of the project if the item evolved from a development project.
  - Agency or agencies to be charged with the preparation of specifications, the determination of requirements, the provision of funds, purchase, inspection, storage, issue, and maintenance of the item.
  - Initial consumption rate or replacement factor as derived, in accordance with Department of the Army instructions.
  - Supply class for issue (i. e., I, II, III, IV, or V).
  - Initial basis of issue for class II items (for procurement planning purposes).
  - Initial quantities for class IV items. A basis for these quantities is the distribution to appropriate units or overseas commands, or units or commands operating under the direct command of the chief of the using agency.
- f. Technical committees will furnish such of the following information as is pertinent, with each request for classification of an item as an obsolete type:
- Item name.
  - Discussion concerning—
    - Agencies concerned (using agencies).
    - Reason for classification.

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- (c) Related and replacement items including—
  - 1. Name of item.
  - 2. Development status or classification.
- (3) Pertinent data will be indicated as follows:
  - (a) Unit cost of replacement items.
  - (b) Stock status and availability of replacement items.
  - (c) Availability of funds for procurement of replacement items.
  - (d) Quantity and condition of items on hand (if exact figures are not readily available, an estimate will be submitted and indicated as such)—
    - 1. In depots.
    - 2. In hands of troops.
  - (e) Unit cost of item or complete set.
  - (f) Estimated cost of maintenance per year if retained, including cost of rehabilitation of items returned to the zone of the interior from oversea commands.
  - (g) What components and accessories will be considered obsolete or otherwise classified as a result of this action.
  - (h) What disposition of the items is contemplated if type classification is approved.
  - (i) Estimate of funds required for action, if significant.
  - (j) Security classification.
- (4) Recommendations will be submitted as to—
  - (a) Recommended classification.
  - (b) Type classification of components peculiar to this item which have no separate classification but are required as separate end items.
  - (c) The approval of the proposed disposition as indicated above.

16. Policy for classification of matériel.—a. The importance of avoiding delay in the processing of the type classification of items of matériel should be realized by all concerned. The classification of an item as a standard type enables the basis of issue to be determined and procurement planning for necessary production to be inaugurated.

b. When an item of matériel shows a favorable performance during test and is a marked improvement over an existing adopted item, recommendations for classification may be initiated by the chief of the developing agency concerned after consultation with the using agency.

c. The classification of matériel as to type will be dictated solely by the military effectiveness and the availability of the subject matériel. When surplus stocks of items of modern effective matériel exist, the

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items will not be declared obsolete solely as grounds for their disposal, or solely as grounds for procuring more effective matériel. Conversely, the stock position of old, ineffective, or inefficient matériel must not affect the decision as to type classification of modern and more effective matériel, nor the decision to reclassify as obsolete type if otherwise warranted.

d. All assemblages of matériel will be classified as to type in accordance with prescribed procedure. These assemblages will be carefully screened by the developing agency concerned to insure that there is not a like assemblage already in existence within the National Military Establishment or under development. Some individual components of an assemblage may be identical with articles procured by other Government agencies.

e. To facilitate manufacturing processes, the chief of a developing agency may without prior approval of the using agency, make changes in component parts of adopted items and assemblages, provided the approved military characteristics of the complete item or assemblage are not changed thereby and provided further that such changes do not affect performance, accessibility or ease of maintenance. Such changes, however, will be reported to the using agency as a matter of information.

SECTION V

PROCEDURES GOVERNING MODIFICATION OF  
MATÉRIEL

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Initiation and approval of modification projects	19
Preparation of and changes to modification work orders	20
Responsibility for modification of matériel	21
System of classification	22
Procedure for modifying captured enemy matériel	23

17. Definition.—A modification is a major or a minor change in the design or assembly of an adopted type item of matériel.

18. Purpose of modifications.—Matériel may be modified for any one of a variety of reasons, such as to increase the safety of personnel, reduce excessive maintenance, increase combat or operating effectiveness, or to facilitate production.

19. Initiation and approval of modification projects.—a. Any individual or agency may submit suggestions for modifications through proper command channels. The chief of the developing agency having primary responsibility for an item of matériel will evaluate the need

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except that the chief of the responsible developing agency is authorized to exclude matériel which may be in depot stock or in the supply channel from the urgent classification. These exceptions shall be clearly described in the MWO. He may also require periodic reports of progress by organizations performing *urgent* modifications, if deemed desirable.

b. The *normal* classification requires that the modification be accomplished as soon as practicable within current resources. Items in storage which are already processed and packaged are not affected unless specifically directed by the chief of the responsible developing agency.

23. Procedure for modifying captured enemy matériel.—In order to exploit fully enemy matériel captured in large quantities it is frequently necessary to modify such matériel. The same procedure as described above for modification of United States Army matériel applies to the modification of captured enemy matériel, except that the modification work order for such matériel will bear the identifying letter (E) in parentheses suffixed to the number.

[AG 400.112 (28 Feb 49)]

BY ORDER OF THE SECRETARY OF THE ARMY:

OFFICIAL:

EDWARD F. WITSELL  
Major General  
The Adjutant General

OMAR N. BRADLEY

Chief of Staff, United States Army

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