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COMPENDIUM OF TEST TERMINOLOGY,(U)
DEC 78 J R CARLSON, G R THOMSON, J SIVY
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COMPENDIUM OF TEST TERMINOLOGY

DECEMBER 1978

COMPILED BY:

THE JOINT LOGISTICS COMMANDERS AD HOC GROUP ON TEST AND EVALUATION PLANNING GUIDANCE

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This Compendium is an extensive collection of current test terms and their definitions as given in Army, Navy, Air Force, DOD and OMB Directives.

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This Compendium of Test Terms provides a reference document for the working level person in a joint service program. It is a source document which lists the most commonly used definitions for standard test terms. This Compendium should be of benefit during all interservice dialogue concerning test and evaluation.

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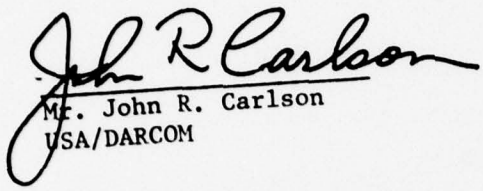

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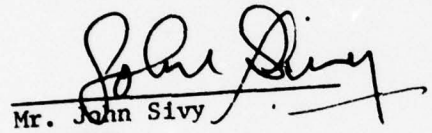

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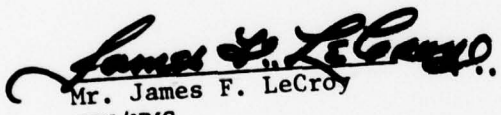

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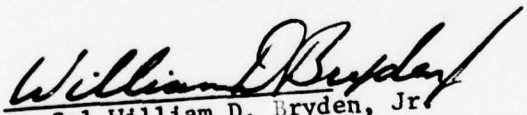

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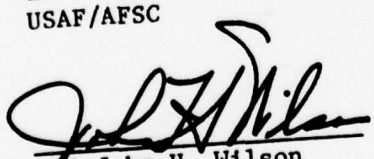

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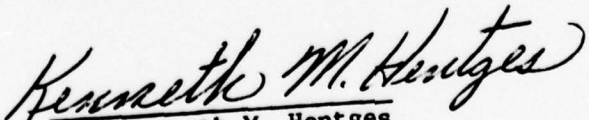

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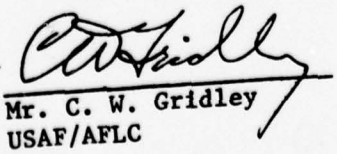

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FOREWORD

This Compendium of Test Terms provides a reference document for the working level person in a Joint Service Program. It is an attempt to provide a source document including the most commonly used definitions for standard test terms. The multiple definitions allow cross referencing when the different services or agencies use the same term. This should be of benefit during all interservice dialogue, and particularly during the development of test plans and documentation.

The Compendium does not indicate preferred definitions. However, the normal order of the status of definitions is as follows:

1. OSD Level (example: DOD Directive 5000.3)
2. DOD Level (example: JCS Pub 1)
3. Service or Agency Level (example: AR 70-10)

(There may also be a hierarchy of regulations and manuals within each service).

The Compendium was prepared by the Joint Logistics Commanders Ad Hoc Group on Joint Service Test and Evaluation Planning Guidance. Review will be annually, with update when the review committee determines it is necessary. The review committee will be chaired by the Air Force (HQ AFSC/TEVP) with representatives from the Army (DARCOM/DRCDE-RT), Navy (NMC/MAT 08E12) and Air Force (AFALD/PTX).

Requests for additional copies and recommendations for changes, corrections, or additions to the Compendium should be submitted to one of the following offices:

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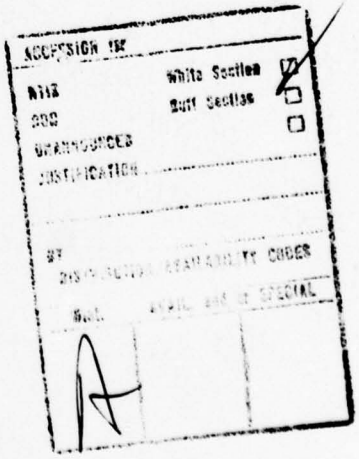

ABBREVIATIONS AND ACRONYMS

NOTE: The parenthetical letter preceding each abbreviation and acronym identifies the source; (A) Army, (F) Air Force, (N) Navy (D) DOD (all services and agencies), and (O) OSD.

(N)	ACAT	Acquisition Category
(A)	ADVT-C/G	Advanced Development Verification Test-Contractor/Gov't
(F)	AFPE	Air Force Preliminary Evaluation
(F)	AFPRO	Air Force Plant Representative Office
(A)	AP	Acquisition Plan
(A)	APM	Army Program Memorandum
(A)	ASARC	Army Systems Acquisition Review Council
(N)	ASU	Approval for Service Use
(N)	AT	Acceptance Trials
(N)	AUTEC	Atlantic Undersea Test and Evaluation Center
(D)	BITE	Built-in Test Equipment
(N)	BT	Builders Trial
(D)	CDRL	Contract Data Requirements List
(N)	CF/CD	Concept Formulation/Contract Definition
(D)	CFE	Contractor-Furnished Equipment
(D)	CFM	Contractor-Furnished Material
(N)	CNO	Chief of Naval Operations
(N)	COT	Consolidated Operability Test
(A)	CTP	Coordinated Test Program
(N)	DA	Developing Agency
(D)	DCP	Decision Coordinating Paper
(D)	DID	Data Item Description
(D)	DOD	Department of Defense
(A)	DPM	Defense Program Memorandum
(D)	DSARC	Defense Systems Acquisition Review Council
(A)	DT	Development Testing
(D)	DT&E	Development Test and Evaluation
(A)	DTP	Detailed Test Plan
(A)	DT I/II/III	Development Test I, II, and III
(N)	DT-I/IV	Development Test and Evaluation - Phase One/Four
(A)	EDT-C/G	Engineer Design Test - Contractor/Government
(N)	FACI	First Article Configuration Inspection
(N)	FAT	Factory Acceptance Test
(D)	FCA	Functional Configuration Audit
(A)	FDT&E	Force Development, Testing and Experimentation
(A)	FOE	Follow-On Evaluation
(D)	FOT&E	Follow-On Test and Evaluation
(N)	FOT&E	Follow-On Operational Test and Evaluation
(N)	FSCR	First Ship Configuration Review
(N)	FSD	Full Scale Development
(A)	IEP	Independent Evaluation Plan
(A)	IER	Independent Evaluation Report
(D)	ILS	Integrated Logistic Support
(D)	IOC	Initial Operational Capability

IOT&E	Initial Operational Test and Evaluation
IPR	In-Process Review
JDT&E	Joint Development Test and Evaluation
JOT&E	Joint Operational Test and Evaluation
JSOR	Joint Service Operational Requirement
JT&E	Joint Test and Evaluation
JTF	Joint Test Force
LOA	Letter of Agreement
LR	Letter Requirement
LSET	Logistics Supportability Evaluation Team
MENS	Mission Element Need Statement
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MSI	Maintenance Support Index
MTBF	Mean Time Between Failure
NDCP	Navy Decision Coordinating Paper
NPR	Naval Plant Representative
OAP	Outline Acquisition Plan
OPEVAL	Operational Evaluation
OSM	Operational Suitability Model
OT I/II/III	Operational Test I, II, and III
OT-I/IV	Operational Test and Evaluation, Phase One/Four
OT&E	Operational Test and Evaluation
OTEMP	OT&E Master Program
OTP	Outline Test Plan
PASU	Provisional Approval for Service Use
PAT&E	Production Acceptance T&E
PCA	Physical Configuration Audit
PDA	Principle Development Activity
PI	Program Introduction (Document)
PM	Program Manager
PM	Program Memorandum
PM	Project Manager
PMA	Program Manager Naval Air Systems Command
PMD	Program Management Directive
PMP	Program Management Plan
PQT-C/G	Prototype Qualification Test - Contractor/Government
PTO	Participating Test Organization
PVT-C/G	Production Validation Test - Contractor/Government
RDT&E	Research Development Test and Evaluation
ROC	Required Operational Capability
RTO	Responsible Test Organization
SC	Statement of Capabilities
SHAPM	Ship Acquisition Project Manager
SON	Statement of Need
SPO	System Program Office
SPV	Specification Performance Validation
(S)SARC	(Service) System Acquisition Review Council
TDP	Test Design Plan
T&E	Test and Evaluation
TECHEVAL	Technical Evaluation
TEMP	Test and Evaluation Master Plan (See CTP)

(F)	TEOA	Test and Evaluation Objectives Annexes
(N)	TEPG	Test and Evaluation Planning Group (See TPWG and TIWG)
(A)	TIWG	Test Integration Working Group (See TPWG and TEPG)
(F)	TO	Technical Order
(F)	TPO	Test Program Outline
(F)	TPWG	Test Planning Working Group (See TEPG and TIWG)

COMPENDIUM OF TERMS AND DEFINITIONS

Attached is a list of service terms and definitions commonly used in association with Joint Test Programs. The parenthetical letter preceding the term or definition identifies the source; (A) Army, (F) Air Force, (N) Navy, (D) DOD (all services and agencies), (O) OSD, and (B) Office of Management and Budget.

(F) Acceptance Tests. Those tests performed to demonstrate that a specific article or lot of articles has been manufactured to specification tolerances. (AFR 80-14)

(N) Acceptance Trials (AT). Trials and materiel inspection conducted underway by the Trial Board for ships constructed in a private shipyard to determine suitability for acceptance of a ship. (OPNAVINST 4700.8F)

(A) Acquisition Plan (AP). A document which records program decisions, contains the user's requirement, provides appropriate analysis of technical options and the life cycle plans for development, testing, production, training, and logistic support of systems or items. The development plan is used for both developmental and nondevelopmental items. It is the document of record maintained to reflect all phases of planning and program execution. (AR 70-27)

(F) Acquisition Process. Normally, it consists of four phases (Program Initiation, Demonstration and Validation, Full Scale Engineering Development, Production and Deployment) with key decision points at the start of each phase. (AFR 80-14)

(O) Acquisition Risk. The chance that some element of an acquisition
(F) program produces an unintended result with an adverse effect on system effectiveness, cost, or availability for deployment. (DOD 5000.3) (AFR 80-14)

(F) Advanced Development. Line item projects which have advanced to a point where the development of experimental hardware for technical or operational testing is required prior to the determination of whether these items should be designed or engineered for eventual service use. (AFM 11-1)

(A) Advanced Development Verification Test-Contractor (ADVT-C). A test conducted by a contractor during the Validation Phase on components, subsystems, and/or systems to demonstrate that contract materiel requirements have essentially been met and provide a significant degree of confidence that the materiel will successfully undergo and complete essential subsequent Government testing. For noncompeting systems this test may constitute the total verification testing required. (DA Pam 70-21)

(A) Advanced Development Verification Test-Government (ADVT-G). A test conducted by the Government during the Validation Phase (only when essential) to independently validate contractor test results and execute those tests beyond the capabilities of the contractor. This test is the final verification test prior to the decision to enter the Full-Scale Development Phase. In the case of competing contractors this verification will always be conducted. (DA Pam 70-21)

(B) Agency Component means a major organizational subdivision of an agency. For example: The Army, Navy, Air Force, and Defense Supply Agency are agency components of the Department of Defense. The Federal Aviation Administration, Urban Mass Transportation Administration, and the Federal Highway Administration are agency components of the Department of Transportation. (A-109)

(B) Agency Missions means those responsibilities for meeting national needs assigned to a specific agency. (A-109)

(F) Air Force Designated Acquisition Program (AFDAP). A systems acquisition program not qualifying as a major system acquisition but determined by the Secretary of the Air Force to be of such importance and priority as to require special management attention and Secretarial level milestone decisions. (AFR 80-14)

(F) Air Force Preliminary Evaluation (AFPE). The AFPE is conducted to evaluate the sytems performance and the technical and engineering potential, identify any gross deficiencies, and determine the degree to which contract specifications are being met (includes an assessment of operational effectiveness and suitability). (AFR 80-14)

(A) Army Program Memorandum (APM). An acquisition recording document used by HQDA in the management of programs deemed by the Army to be major, and for which program approval authority rests with HQDA (i.e., neither a decision coordinating paper nor a defense program memorandum has been required). (AR 70-27)

(F) Automatic Test Equipment. A generic term for equipment (separate or built in) satisfying a test function (diagnostic or condition indicating) and possessing an automatic capability. In this sense, automatic test equipment can be either a part of the mission equipment or it can be a part of support equipment. (Also, see MIL STD 1309.) (AFM 11-1)

(A) Availability. Availability is a measure of the degree to which an item is in the operable and commitable state at the start of the mission when the mission is called for at an unknown (random) time (inherent availability is considered synonymous with operational readiness. (AR 702-3)

(O) Availability. A measure of the degree to which an item is in the operable and commitable state at the start of a mission when the mission is called for at an unknown (random) time. (DODD 5000.3)

(F) Availability. A measure of the degree to which an item is in operable and commitable state at the start of a mission when the mission is called for at an unknown (random) time (inherent availability) (MIL-STD 721B). For DT&E purposes, availability is considered synonymous with operational readiness. (AFR 80-14)

(A) Band of Performance. A ceiling and floor that describes a performance characteristic of a system. The ceiling is the most cost and operational effective capability that can be achieved by the materiel developer without exceeding the maximum acceptable cost for the systems. The performance floor is the least operational capability acceptable to the user regardless of the potential for increased performance or accelerated initial operational capability (IOC) date. (AR 70-10)

(F) Bench Check. A work shop or servicing bay check which includes the typical check or actual functional test of an item to ascertain what is to be done to return the item to a serviceable condition or ascertain the item's temporary or permanent disposition. (AFM 11-1)

(F) Bench Test. See Bench Check. (AFM 11-1)

(A) Brassboard Configuration. An experimental device (or group of devices) used to determine feasibility and to develop technical and operational data. It will normally be a model sufficiently hardened for use outside of laboratory environments to demonstrate the technical and operational principles of immediate interest. It may resemble the end item, but is not intended for use as the end item. (AR 70-10)

(A) Breadboard Configuration. An experimental device (or group of devices) used to determine feasibility and to develop technical data. It will normally only be configured for laboratory use to demonstrate the technical principles of immediate interest. It may not resemble the end item and is not intended for use as the projected end item. (AR 70-10)

(N) Builder's Trial. Evaluation trials and inspection conducted underway by the Builder for the purpose of assuring the Builder and the Navy that the ship is, or will be, ready for Acceptance Trials. This trial should be a comprehensive test of all ship's equipment and approximate the scope of the Acceptance Trial. (OPNAVINST 4700.8F)

(F) Built-in Test Equipment. Any device permanently mounted in the prime equipment, and used for the express purpose of testing the prime equipment, either independently or in association with external test equipment. (AFM 11-1)

(F) Captive Test. A test conducted while the missile is secured to a test stand or launch platform. (AFM 11-1)

(F) Checkout Equipment. See Test Equipment. (AFM 11-1)

(F) Checkout Time. See Testing Time. (AFM 11-1)

(A) Climatic Test. A test designed and conducted to assess suitability of an item or system when it is to be operated or used in a wide climatic spectrum, from extreme climates to normal operational climates. (AR 70-10)

(F) Cold Mission. A scheduled test, mission, or other activity determined to be nonhazaradous to the extent that work party activities or other simultaneous and joint nonfiring operations can be safely conducted within the designated test area. (AFM 11-1)

(A) Combat Developer. The command or agency responsible for the formulation of concepts, doctrine, organization (excluding Army wholesale logistics) and materiel objectives, and requirements for the employment and support of US Army forces in a theater of operations and in the control of civil disturbances. (AR 71-3)

(A) Combat Developments. A major component of force development which encompasses the formulation of concepts, doctrine, organization and materiel objectives, and requirements for the employment of US Army forces in a theater of operations and in the control of civil disturbances. (AR 71-3)

(O) Combat System Test Installation. A collection of subsystems (including weapon, sensor, and information-processing equipment) together with their interfaces installed, for the purposes of early testing prior to the availability of a first production item, at a test facility designed to simulate the essential parts of the production item. (DODD 5000.3)

(A) Combined Development and Operational Testing (DT/OT). Conducted jointly by DT and OT test organizations to achieve test objectives for both DT and OT. It can be a complete test, a subtest, or a phase of a test. (AR 71-3)

(F) Combined Testing. Testing conducted by the development and operational testers when, due to costs, schedules or test item availability, they share test facilities and resources. (AFR 80-14)

(F) Command Destruct. A system which destroys the missile, actuated on command of the range safety officer, whenever missile performance degrades enough to be a safety hazard. See also command destruct signal; destruct (missile). (AFM 11-1)

(O) Compatibility. The capability of two or more operational items/
(F) systems to exist or function as elements of a larger operational system or operational environment without mutual interference. (DODD 5000.3) (AFR 80-14)

(F) Confidence Test. A test primarily performed to increase the confidence that the unit under test is operating acceptably. (AFM 11-1)

(O) Contingency Testing. Additional testing required to support a
(F) decision to commit added resources to a program, when significant test objectives have not been met during planned tests. (DODD 5000.3) (AFR 80-14)

(A) Coordinated Test Program (CTP). A planning document which formalizes the all-inclusive testing activities relating to a development project. It is evolutionary, sectionalized by major tests, and developed and maintained by the materiel developer on an item or system basis. The CTP is a source of data for the Army's T&E Master Plan (TEMP) as required in DOD 5000.3. It is coordinated with appropriate agencies prior to approval. (AR 70-10) See Test and Evaluation Master Plan.

(A) Cost and Operational Effectiveness Analysis (COEA). A documented investigation of -

a. Comparative effectiveness of alternative means of meeting a requirement for eliminating or reducing a force or mission deficiency.

b. The validity of the requirement in a scenario which has the approval of TRADOC and HQDA.

c. The cost of developing, producing, distributing, and sustaining each alternative in a military environment for a time preceding the combat application. (AR 71-9)

(A) Cost and Training Effectiveness Analysis (CTEA). A methodology which involves documented investigation of the comparative effectiveness and costs of alternative training systems for attaining defined performance objectives, taking into consideration usage patterns and training scenarios. A CTEA can examine training concepts, training equipment, training strategies, programs of instruction, training impacts of new materiel, organization, tactics, employment techniques, or families of systems. (AR 71-3)

(O) Critical Issues. Those aspects of a system's capability, either
(F) operational, technical, or other, that must be questioned before a system's overall suitability can be known and that are of primary importance to the decision authority in reaching a decision to allow the system to advance into the next phase of development. (DODD 5000.3) (AFR 80-14)

(A) Critical Test Incident. An incident of concern occurring during materiel testing which involves a catastrophic or critical hazard affecting the safety of personnel, performance of man-machine interface, or makes test suspension advisable. (DARCOM/DRCDE-RT)

(A) Decision Authority. The officials responsible for making decisions concerning decision point transitions for materiel acquisition. (AR 71-3)

(A) Decision Coordinating Paper (DCP). A summary document for the Secretary of Defense that presents the rationale for starting, continuing, or stopping a development program at each critical point. It identifies the issues in each decision and assesses the important factors, including threat, risks, full military and economic consequences, and the pros and cons of each alternative. Once the Secretary of Defense has approved the DCP, it is a "contract" between the Secretary of Defense and the implementing service secretary to define the latitude of the service in managing the program within the thresholds of cost, performance and schedule. (AR 70-27)

(F) Decision Coordinating Paper (DCP). The principle document to record essential system program information for use in support of the Secretary of Defense/Secretary of the Air Force decision making process. A DCP intended for final approval by the Secretary of the Air Force is called an Air Force Decision Coordinating Paper (AFDCP). (AFR 80-14)

(O) Decision Coordinating Paper (DCP). The principal document to record essential system program information for use in support of the Secretary of Defense decision-making process at Milestones, I, II and III. (DODD 5000.1)

(A) Decision Review. A program review conducted by the DSARC, ASARC, or IPR. (AR 71-3)

(O) Defense Acquisition Executive. The principal advisor and staff assistant to the Secretary of Defense and the focal point in OSD for system acquisitions. (DODD 5000.1)

(O) Defense Mission. The mission of the DOD as specified by the legislative authority. (DODD 5000.1)

(A) Defense Program Memorandum (DPM). A OSD directed acquisition recording document that presents rationale for starting, continuing, reorienting, or stopping a program at each critical phase in the acquisition cycle. It identifies objectives, conditions and issues pertinent to each decision and assesses all important factors which influence the decision. It is an official document which records the decision(s) of the OSD staff principals. When approved, it constitutes a contract between OSD and the Army, and defines the Army's latitude in managing the program. (AR 70-27)

(O) Defense System Acquisition Review Council (DSARC). An advisory body to the Secretary of Defense on major system acquisitions. The Council members are the OSD staff principals. (DODD 5000.1)

(F) Defense Systems Acquisition Review Council (DSARC). An advisory council established by and functioning for the Secretary of Defense (SECDEF) to apprise the SECDEF of the program status and readiness of a major defense system prior to proceeding to the next phase in the acquisition process. (AFR 80-14)

(A) Department of the Army System Coordinator (DASC). The individual (or team) designated by the Deputy Chief of Staff for Research, Development and Acquisition (DSCRDA) to function as the HQDA point of contact for all aspects of system development and to coordinate the status of all events in the life-cycle system management model for a major system, a designated nonmajor system requiring HQDA IPR approval, or one or more other similar or related nonmajor systems selected for DASC management. (AR 70-16)

(A) Detailed Test Plan (DTP). A set of explicit instruction for directing every phase of the test, particularly test control and data collection and analysis. (AR 70-10)

(N) Development Proposal (DP). DPs are prepared by the Naval Material Command or Bureaus, and present alternatives and tradeoffs to achieve a particular range of capabilities, in response to the OR. (OPNAVINST 5000.A2)

(N) Development Proposal Manager (DPM). The official assigned the responsibility for coordinating and controlling preparation of a Development Proposal (DP). (NAVMATINST 5000.22A)

(A) Development Testing (DT). Testing of materiel systems conducted by the materiel developer using the principle of a single, integrated development test cycle to demonstrate that the design risks have been minimized, that the engineering development process is complete, and that the system will meet specifications; and to estimate the military utility of the system when it is introduced. DT is conducted in factory, laboratory, and proving ground environments. (AR 70-10)

(A) Development Test I (DT I). A generic term which encompasses the major tests conducted during the Validation Phase. The DT I includes the EDT-C, EDT-G, ADVT-C AND ADVT-G. (DA Pam 70-21)

(A) Development Test II (DT II). A generic term which encompasses the major tests conducted during the Full-Scale Development Phase. The DT II includes EDT-C, EDT-G, PQT-C and PQT-G. (DA Pam 70-21)

(A) Development Test III (DT III). A generic term which encompasses the major tests conducted during Initial Production. The DT III includes the PVT-C and PVT-G. (DA Pam 70-21)

(O) Development Test and Evaluation. That test and evaluation conducted
(F) to assist the engineering design and development process and verify attainment of technical performance specifications and objectives. (DODD 5000.3) (AFR 80-14)

(F) Development Testing and Evaluation. That testing and evaluation used to measure progress, verify accomplishment of development objectives, and to determine: if theories, techniques, and materiel are practicable; and if systems or items under development are technically sound, reliable, safe, and satisfy specifications. (AFM 11-1)

(A) Doctrinal and Organizational Test Support Package. This package is provided by the combat developer and contains the following elements: Means of employment (e.g., doctrine, tactics, techniques), organization (e.g., MOS, basis of issue, unit structure), logistical concepts (e.g., applicable supplies, transportation, maintenance), mission profiles (e.g., types of combat activities, frequency of events in combat missions, and times of events and between events), and test setting (e.g., situation showing interactions among threat, friendly actions, and environment). This package may include a list of pertinent Field Manuals (FM) or FM extracts. (AR 71-3)

(A) Doctrine. A fundamental principle by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative, but requires judgement in application. (AR 71-3)

(A) DT Government Verification Test. A generic term encompassing Advance Development Verification Testing - Government (ADVT-G), Prototype Qualification Testing - Government (PQT-G), and Production Validation Testing - Government (PVT-G) whose execution is the responsibility of TECOM and normally conducted by TECOM. (DARCOM/DRCDE-RT)

(A) Durability. A special case of reliability. Durability is the probability that an item will successfully survive its projected service life, overhaul point, or rebuild point (whichever is the more appropriate durability measure for the item) without a durability failure. A durability failure is a malfunction that precludes further operation of an item and that necessitates replacement or rebuild because of degraded safety or because of excessive cost or time to restore. (AR 702-3)

(A) Effectiveness. A measure of the extent to which an item satisfies a set of specific, pre-established requirements. (AR 70-10)

(A) Engineer Design Test (EDT). A test to determine inherent structural, mechanical, electrical, or other physical and chemical properties of construction, materials, a component, subassembly, or prototype assembly, item or system, including the effect of environmental stresses on these properties. The test is characterized by controlled conditions, the presence of hypothesis and criteria in the test plan, and as far as possible, the elimination of human error and judgement through the utilization of proper instrumentation and modern statistical methods. (DA Pam 70-21)

(A) Engineer Design Test-Contractor (EDT-C). A test conducted by a contractor during the Validation or Full-Scale Development phase to determine achievability of critical system technical characteristics, provide data for refining and ruggedizing hardware configurations, eliminate technical design risks or determine manageability of risks, and provide for evolution and verification of design changes. (DA Pam 70-21)

(A) Engineer Design Test-Government (EDT-G). A test conducted by a developer during the Validation or Full-Scale Development Phase to determine achievability of critical system technical characteristics, eliminate technical design risks or determine manageability of risks, and provide for evolution and verification of design changes. (DA Pam 70-21)

(A) EPR Correction Summary. A report summarizing the corrective actions planned or taken by the proponent materiel developer on all critical and major test incidents. (DARCOM/DRCDE-RT)

(A) EPR Cumulative Summary. A cumulative report summarizing all critical, major, and minor test incidents associated with maintenance actions of replace, repair, adjust, or remove/install. (DARCOM/DRCDE-RT)

(A) Equipment Performance Report (EPR). A report prepared by a test activity following a technical evaluation of a test incident associated with materiel undergoing test. (DARCOM/DRCDE-RT)

(F) Evaluation. The review and analysis of qualitative or quantitative data obtained from design review, hardware inspection, testing, or operational usage of equipment. (AFR 80-14)

(F) Evaluation Criteria. A quantitative or qualitative measure of system performance that is established to provide a basis for interpreting operational test results. Evaluation criteria must take into account the user's requirements, the maturity of the system under test, and the operational environment in which the system will ultimately be employed. (AFR 80-14)

(F) Executive Agency. See Lead Service. (AFR 80-14)

(B) Executive Agency. An executive department, and an independent establishment within the meaning of sections 101 and 104(1), respectively, of Title 5, United States Code. (A-109)

(F) Executive Service. See Lead Service. (AFR 80-14)

(D) Exercise. A military maneuver or simulated wartime operation involving planning, preparation, and execution. It is carried out for the purpose of training and evaluation. *It may be a combined, unified,* joint, or single Service exercise, depending on participating organizations. (JCS PUB 1) (AFR 80-14)

(A) Field Exercise. An exercise conducted in the field under simulated war conditions in which troops and armament of one side are actually present, while those of the other side may be imaginary or in outline. (AR 71-3)

(A) Findings. Statements derived from test data concerning relationships among conditions or results of test. (AR 71-3)

(A) First Article Testing. First Article Testing as defined in section I, part 19 of ASPR is designed to insure that the contractor can furnish a product that meets established technical criteria. In regard to production testing, one of two types of First Article Testing is generally utilized, i.e., preproduction testing or initial production testing. First Article tests may be conducted at the contractor's facilities, procuring agency facilities or government testing installations.

a. First Article preproduction testing (FA-PPT):

FA-PPT are conducted to determine producibility of a model or group of models of the item being procured, normally built on production tooling prior to initiation of full-scale or rate production, in accordance with the technical data package at the facility in which that item is to be produced under the contract.

b. First Article initial production testing (FA-IPT):

FA-IPT are conducted on an item or sample of items randomly selected from the first production lot. They are conducted to verify the quality of the materiel when produced according to the technical data package and the full production process. (AR 702-9)

(F) First Major Production Decision. The decision to begin production of procurement-funded end items intended for Service deployment. (AFR 80-14)

(A) Five-Year Test Program (FYTP). A compendium of approved outline test plans and resume sheets for user testing. It is a tasking document for test execution and resource allocation that is developed within existing budget and program constraints in accordance with Army priorities for the current and budget years and provides planning guidance for the outyears. (AR 71-3)

(F) Follow-On Operational Test and Evaluation. That T&E which is conducted after IOT&E to refine the estimates made during the IOT&E, and to evaluate changes. It is also conducted to re-evaluate the system to ensure that it continues to meet operational needs and retains its effectiveness in the current or forecast operational environment or against a newly defined threat. (AFR 80-14)

(A) Force Development. The process of translating projected DA resource-manpower, fiscal, and materiel--into time-phased programs and structure (expressed in dollars, equipment, and units) necessary to accomplish assigned missions and functions. (AR 71-3)

(A) Force Development Testing and Experimentation (FDTE). Tests that range from a small, highly instrumented, and high-resolution field experiment, to a large, less instrumented, low-resolution, but still a controlled scenario, field test. Data from these tests are evaluated largely by using subjective rather than analytical techniques. They are conducted to evaluate new concepts of tactics, doctrine, and organization, and new items of materiel. (AR 70-10)

(A) Full-Scale Development Phase. The third phase in the materiel life-cycle during which a system, including all items necessary for its support, is fully developed, engineered, fabricated, tested, and initially type classified. Concurrently, nonmateriel aspects required to field an integrated system are refined and finalized. These include such aspects as basis of issue plans (BOIP); personnel and equipment requirements and publications; integrated logistic support; and modifications of doctrine, organization, and MOS. (AR 71-3)

(F) Full-Scale Development Phase. The period when the system/equipment and the principle items necessary for its support are designed, fabricated, tested, and evaluated. The intended output is, as a minimum, a pre-production system which closely approximates the final product, the documentation necessary to enter the production phase, and the test results which demonstrate that the production product will meet stated requirements. (AFM 11-1)

(F) Functional Test. A test performed to demonstrate that the item operates as specified (required). (AFM 11-1)

-G-

(F) Go-No-Go Test Equipment. Provides only one or two alternative answers to any question. It tells only whether a given signal is in or out of tolerance. (AFM 11-1)

-H-

(A) Health Hazards/Safety Assessment. The evaluation of potential or real hazards to health and/or performance of user or test personnel inherent to the design and operation of materiel. Ordinarily, this assessment considers issues of health, human factors, and safety implications, and is made by the appropriate, qualified professionals in these disciplines. (AR 71-3)

(F) Human Factors. Those factors which contribute to the optimization of a system by integrating the human performance necessary to operate, maintain, support and control the system in its intended operational environment. (AFR 80-14)

(A) Human Factors Engineering (HFE) Testing. Assessing HFE by evaluating the man-equipment combination. (AR 71-3)

(F) Implementing Command. The command responsible for the acquisition or modification of the system, subsystem, or item of equipment. (AFR 80-14)

(A) Independent Evaluation, DT. The process by which the materiel developer examines development test data and test reports; extrapolates from other evidence, including experimental and analytical data; and uses engineering judgement to assess and evaluate the capabilities of the tested materiel systems, including RAM. Each independent evaluation assesses the adequacy of testing and the validity of the test results. (AR 70-10)

(A) Independent Evaluation, OT. The process independent of the materiel developer and the using command which is used to examine the test design and test report; to extrapolate from other evidence, including experimental, historical, and analytical data; and which provides military judgment to assess or estimate the military utility and operational effectiveness of the tested system, including RAM. For OT, it is used to concentrate on the operational aspects of the materiel system and to consider other programmed testing and comments on operation tests provided by participants in the materiel acquisition process. Each independent evaluation is used to assess the adequacy of testing and the validity of test results. (AR 70-10)

(A) Independent Evaluation Plan (IEP). The materiel developer's or operational tester's internal master plan for the evaluation of a materiel system's technical or operational effectiveness. (AR 70-10)

(A) Independent Evaluation Report (IER). Provides an assessment of item or system operational effectiveness versus critical issues as well as the adequacy of testing to that point in the development of the item or system. (AR 71-3)

(A) Information EPR. An EPR recording a test incident which does not qualify for classification as a critical, major, or minor test incident; which provides partial information pending completion of the evaluation (evaluation taking longer than 5 workdays) of a test incident; or which involved timely knowledge of information. (DARCOM/DRCDE-RT)

(D) Initial Operational Capability. The first attainment of the capability to employ effectively a weapon, item of equipment, or system of approved specific characteristics, and which is manned or operated by an adequately trained, equipped, and supported military unit or force. (JCS PUB 1)

(A) Initial Operational Capability (IOC) FDTE. IOC FDTE is conducted subsequent to the full-production decision and in coordination with the IOC unit training cycle. This testing is normally initiated by the user representative and is planned, funded, and conducted by the user representative. In some cases, the operational tester may recommend to the decision review authority that IOC FDTE be conducted

to evaluate the provisions for logistic support on a broader scale or to verity doctrine, tactics, training, communications and control, or interface with other systems. If IOC FDTE is approved by the decision review, this constitutes tasking authority. (AR 71-3)

(N) Initial Operational Test and Evaluation(IOT&E). All IOT&E conducted prior to the first major production decision. (OPNAVINST 3960.10)

(F) Initial Operational Test and Evaluation. The first phase of operational test and evaluation conducted on preproduction items, prototypes, or pilot production items and normally completed prior to the first major production decision. It is conducted to provide a valid estimate of a systems operational effectiveness and operational suitability prior to the first major production decision. (AFM 11-1)

(O) Initial Operational Test and Evaluation. That portion of Operational Test and Evaluation conducted prior to the Milestone III decision. (DODD 5000.3)

(A) Innovative Testing. Small-Scale tests conducted to develop concepts and/or requirements that later may be used to support changes to existing concepts or hardware. (AR 71-3)

(A) In-Process Review (IPR). A review of a nonmajor materiel acquisition program conducted at critical points in the life cycle to evaluate military utility and costs, accomplish effective coordination, and facilitate proper and timely decisions bearing on the future course of the program. (AR 70-1)

(A) Instrumentation. Scientific or technical equipment used to measure, sense, record, transmit, process, or display data during tests or examination of materiel. (AR 71-3)

(A) Interchangeability Test (ICT). An interchangeability test is a test of random samples of production line items. It is scheduled and conducted to assure interchangeability when the items are delivered to the user. Interchangeability tests can be conducted on a piece part basis with the next higher assembly, on a sub-assembly basis, qualify for classification as a critical, major, or minor test incident; which provides partial information pending completion of the evaluation (evaluation taking longer than 5 workdays) of a test incident; or which involves timely knowledge of information. (AR 702-9)

(D) Interoperability. 1. The ability of systems, units or forces to provide services to and accept services from other systems, units or forces and to use the services so exchanged to enable them to operate effectively together. 2. The condition achieved among communications-electronics equipment when information or services can be exchanged directly and satisfactorily between them and/or their users. The degree of interoperability should be defined when referring to specific cases. (JCS Pub 1)

(O) Interoperability. The ability of systems, units, or forces to
(F) provide services to, and accept services from, other systems, units, or forces, and to use the service so exchanged to enable them to operate effectively together. (DODD 5000.3) (AFR 80-14)

(A) Interoperability. Capability of two or more items or components of equipment to perform essentially the same function or to complement each other in a system regardless of differences in technical characteristics and with negligible additional training of personnel. (AR 71-3)

(N) Interoperability. The capability of a system (or subsystem) to transfer information (or services), as required, to or from other systems (or subsystems). A radar is interoperable with a gun system if the radar causes the gun to point at the target; CAINS (Carrier Aircraft Inertial Navigation System) must be interoperable with SINS (Ships Inertial Navigation System) for initial alignment; a fuse must be interoperable with the warhead in order for the firing signal to get through. Note that the man/machine interface is an information or services transfer. Thus operability is included in interoperability. (COMOPTEVFORINST 3960.1A)

(A) Issues. Any aspect of the system's capability, either operational, technical, or other, that must be questioned before the system's overall suitability can be known. *Operational issues are those that* must be evaluated considering the soldier and the machine as an entity to estimate the military utility, operational effectiveness, and operational suitability of the system in its complete user environment. (AR 71-3)

(A) Item. An assembly or any combination of parts, subassemblies, and assemblies mounted together in manufacture, assembly, maintenance, or rebuild. (AR 71-3)

(F) Joint. Connotes activities, operations, etc., in which two or more DOD components participate. (AFR 80-14)

(F) Joint-Service Acquisition Test and Evaluation (JAT&E). T&E conducted jointly, during a joint acquisition program, by two or more DOD components for systems to be acquired by more than one Component or for a Component's systems which have interfaces with equipment of another Component. Subsets are Joint-Service Acquisition Development Test and Evaluation (JADT&E) and Joint-Service Acquisition Operational Test and Evaluation (JAOT&E). (AFR 80-14)

(A) Joint Development Testing. Development testing in which the Army participates with another service and which is conducted to evaluate Army items and systems having an interface or requiring a test environment of another service; or items and systems of another service which require testing in an Army environment. (AR 70-10)

(F) Joint Exercise (JE). An exercise conducted by two or more DOD Components (usually directed by JCS). (AFR 80-14)

(A) Joint Service Operational Requirement (JSOR). A statement of need for the same end item of materiel for operational employment by the Army and at least one other US military service. Army-proposed JSOR usually are directed by higher authority and are prepared and processed following Required Operational Capability (ROC) procedures to the maximum extent practicable. (AR 71-9)

(A) Joint Service Program. An acquisition program which encompasses the
(F) requirements of and is staffed by members of two or more services
(N) (Army, Navy, Air Force). (AR 70-10, AFR 80-14, OPNAVINST 3960.10)

(F) Joint Test and Evaluation Program (JT&EP). An OSD funded non-acquisition program for joint test and evaluation structured to evaluate system operational or technical performance under realistic conditions with two or more Military Services participating on interrelated/interacting weapon systems. Subsets are Joint Development Test and Evaluation Program (JDT&EP) and Joint Operational Test and Evaluation Program (JOT&EP). (AFR 80-14)

(A) Joint Testing. That development and user testing in which the Army participates with another service and which is conducted to evaluate Army items and systems or concepts having an interface with or requiring a test environment of another service; or items and systems, or concepts of another service which require testing in an Army environment. (AR 70-10)

(O) Joint T&E. T&E conducted jointly by two or more DOD Components for systems to be acquired by more than one Component or for a Component's systems which have interfaces with equipment of another Component. (DODD 5000.3)

(A) Joint User Testing. Testing in which the Army participates with one or more of the services to evaluate systems or concepts having an interface with or requiring a test environment of another service. (AR 71-3)

(O) JT&E Program. An OSD-funded program for joint test and evaluation structured to evaluate system operational or technical performance under realistic conditions with two or more Military Services participating on interrelated/interacting weapon systems. (DODD 5000.3)

(N) Landbased Test Site (LBTS). An LBTS is a facility duplicating/simulating as many conditions as possible of a system's planned operational installation and utilization, for the purpose of:

- Developmental or operational test and evaluation.
- Integration and interface testing of equipment and subsystems.
- Subsystem equipment verification.
- Development or verification of technical documentation and production acceptance test procedures.
- Verificiation and validation of operational and maintenance computer software.
- Initial operational or maintenance training.
- Proof testing alteration or modifications.
- Verifying operator and crew task assignments.
- Verification of installation and checkout procedures.
- Pre-installation testing and check-out of suits of production hardware.

The definition includes platforms such as ships and aircraft, when the system under test is installed in a type different from the programmed end model, as well as platforms installed at facilities such as integrated combat system test sites. This would include laboratories, dedicated land facilities and even docked barges which receive test support services (power, water, etc.) from land. Large environmental support facilities, built specifically for a designated system, are included in the LBTS definition. (NAVMATINST 3960.8)

(F) Lead Agency. See Lead Service. (AFR 80-14)

(O) Lead Component. The DOD Component designated by the Secretary of Defense to be responsible for management of a system acquisition involving two or more DOD Components in a joint program. (DODD 5000.1) (See Lead Service)

(A) Lead Service. The service to which higher authority (usually OSD or
(F) JCS) has assigned responsibility and delegated overall management
(N) authority for a joint service system acquisition program. (AR 70-10, AFR 80-14, OPNAVINST 3960.10)

(A) Letter of Agreement (LOA). A jointly prepared and authenticated document in which the combat developer and materiel developer outline the basic agreements for further investigation of a potential materiel system. (AR 71-9)

(A) Letter Requirement (LR). An abbreviated procedure for acquisition of low value items. It is jointly prepared and authenticiated by the combat developer and the materiel developer. (AR 71-9)

(B) Life Cycle Cost. Means the sum total of the direct, indirect, recurring, nonrecurring, and other related costs incurred, or estimated to be incurred, in the design, development, production, operation, maintenance and support of a major system over its anticipated useful life span. (A-109)

(F) Life Cycle Cost. The total cost of an item or system over its full life. It includes the cost of development, production, ownership (operation, maintenance, support, etc.) and, where applicable, disposal (see AFR 800-11). (AFR 80-14)

(O) Limited Production. The initial, low rate production of a system in limited quantity to be used in operational test and evaluation for verification of production engineering and design maturity and to establish a production base prior to a decision to proceed with production. (DODD 5000.1)

(O) Line Authority. DOD officials in the direct chain of authority from the Secretary of Defense to the program manager and excluding staffs. (DODD 5000.1)

(O) Logistic Annex. A brief description of the logistics considerations essential to program planning and decisions at Milestones I, II and III. (DODD 5000.1)

(A) Logistician. A command or agency, other than the materiel developer, trainer, and user representative, which is responsible for independent logistic surveillance and evaluation of materiel acquisition programs. The logistician accomplishes this by reviewing program documents for logistic support considerations and recommending changes to the proponents; by participating in selected special task forces, special study groups, and test integration working groups; by participating as a regular member of IPR's; and by assisting the logistic elements of combat and materiel developers, trainers, and user representatives in carrying out their respective functions in the Integrated Logistic Support Program. (For most equipment, the US Army Logistics Evaluation Agency (LEA) fills this role). (AR 10-25)

(O) Logistics Support. The supply and maintenance of materiel essential to proper operation of a system in the force. (DODD 5000.1)

(O) Logistics Supportability. The degree to which adequate provisions can be made in a system's acquisition for support and test equipment, supply support, maintenance manuals, technical data, and support facilities (DODD 5000.3)

(F) Logistics Supportability. A measure of how well the composite of support considerations necessary to achieve the effective and economical support of a system or equipment for its life cycle meets stated quantitative and qualitative requirements. This includes integrated logistics support (ILS) and logistics-related O&S cost considerations. (AFR 80-14)

(F) Logistics Supportability Evaluation Team (LSET). An AFTEC or MAJCOM OT&E test team activity assigned overall responsibility for planning, conducting, and preparing an assessment of reliability, maintainability, availability, logistics supportability, and selected test-sensitive O&S cost elements. (AFR 80-14)

(O) Long Lead Items. Those components of a system or piece of equipment for which the times to design and fabricate are the longest. An early commitment of funds to such items may be desirable in order to meet the earliest possible data of system completion. (DODD 5000.3)

(F) Long Lead Items. Those components which take the longest time to procure and, therefore, require an early commitment of funds. (AFR 80-14)

(A) Low-Rate Initial Production (LRIP). A low rate of output at the beginning of production to reduce the Government's exposure to large retrofit problems and costs while still providing adequate numbers of hard tool production items for final development and operational tests before a full-production decision is made. (AR 71-3)

(O) Maintainability.
(A) A characteristic of design and installation that inherently provides for an item to be retained in or restored to a specified condition within a given time, when it is maintained in accordance with prescribed procedures and resources. (DODD 5000.3, AR 702-3)

(F) Maintainability. A characteristic of design and installation expressed as the probability that an item will be restored to specified conditions within a given period of time when maintenance is performed in accordance with prescribed procedures and resources. System maintainability may also be expressed in such terms as Mean-time-to-Repair, Maintenance Manhours per Flying Hour, or Mean Down-Time. (AFM 11-1, AFR 80-5)

(N) Maintainability. A characteristic of design and installation which is expressed as the probability that an item will be retained in or restored to a specified condition within a given period of time, when the maintenance is performed in accordance with prescribed procedures and resources. (MIL STD 721-B)

(F) Maintenance Concept. An initial description of maintenance considerations and constraints submitted as a part of the requirements process. It is introduced for design consideration, refinement, and revision in the conceptual phase of each new system or equipment or modification. When it is refined and definitized, it becomes a maintenance plan. (AFR 80-14)

(A) Maintenance Test Support Package. An assemblage of support elements that is provided before and used during development and operational testing and evaluation to validate organizational, direct support, and general support maintenance capability. It typically includes all required draft equipment publications (operator through general support maintenance equipment manuals, lubrication orders, and "Equipment Serviceability Criteria" manuals); repair parts; accessories; special and common tools; test, support, calibration, and maintenance calibration shop facilities; and personnel skill requirements. (AR 750-1)

(F) Major Acquisition Programs. A program designated as major by the SECDEF based on consideration of the followign criteria: an anticipated cost of $75 million in research development test and evaluation or $300 million in production; multiservice or international development or production; political sensitivity; or necessitating a significant technology advance. (AFR 80-14)

(F) Major Command (MAJCOM). As used in this manual, MAJCOM refers to USAF commands (MAJCOMs) and separate operating agencies (SOAs).

a. Implementing Command. (See previous definition.)

b. Operational Test and Evaluation Command/Agency. The command or agency designated by the PMD or other appropriate program directive as responsible for managing the independent OT&E of a system.

c. Participating Command. A command or agency designated by HQ USAF to support and advise the program manager. A supporting command is a participating command.

d. Supporting Command. A command that provides direct support to a system or test program. Normally refers to AFLC, USAFSS, and ATC in their role as logistics support and training organization.

e. Using Command. The command or agency primarily responsible for the operational employment of a system, subsystem or item of equipment. The using command usually submits the SON. (AFR 80-14)

(A) Major Force Development Testing and Experimentation. Tests which have potentially significant impact on the doctrine, organization, and tactics of the Army and are of interest to Congress, Office of the Secretary of Defense, Secretary of the Army, or Chief of Staff of the Army. Major FDTE is managed by OTEA. (AR 71-3)

(B) Major System means that combination of elements that will function together to produce the capabilities required to fulfill a mission need. The elements may include, for example, hardware, equipment, software, construction, or other improvements or real property. Major system acquisition programs are those programs that (1) are directed at and critical to fulfilling an agency mission, (2) entail the allocation of relatively large resources, and (3) warrant special management attention. Additional criteria and relative dollar thresholds for the determination of agency programs to be considered major systems under the purview of this Circular, may be established at the discretion of the agency head. (A-109)

(O) Major System Acquisition. A system acquisition program designated by the Secretary of Defense to be of such importance and priority as to require special management attention. (DODD 5000.1)

(A) Major Systems. Systems which qualify for Defense Systems Acquisition Review Council (DSARC) review and others which are critically important to the Army, complicated, expensive, controversial, or for any reason should involve the top management of the Army. (AR 15-14)

(O) Major Test Incident. An incident of concern occurring during materiel testing which involves significant degradation in mission capability or safety. (DARCOM/DRCDE-RT)

(F) Manual Test Equipment. Test equipment that requires separate manipulations for each task. (AFM 11-1)

(A) Materiel. All items necessary for the equipment, maintenance, operation, and support of military activities without distinction as to their application for administrative or combat purposes; excluding ships or naval aircraft. (AR 71-3)

(A) Materiel Developer (or Developing Agency). The command or agency which, in response to HQDA objectives and requirements, is responsible for research, development, and production validation, and product improvement of materiel systems (to include the system for its logistic support). (AR 71-3)

(A) Materiel Requirement. An HQDA approved requirement for a materiel item or system (e.g., an approved LOA, QMR, MN, TDR, ROC, TELER, or LR). (AR 70-10)

(A) Materiel System. An item, system, or aggregate of systems of materiel (AR 71-9). (For the purposes of OT&E, a materiel system includes: The operational and support hardware; the operating and support personnel; the TOE organization within which the equipment is found; the prescribed doctrine and tactics of employment; the command and control equipment and procedures; and the training program). (AR 71-3)

(A) Measure of Effectiveness (MOE). The quantitative expression (sometimes modified by subjective judgement) of the success of a system in achieving a specified objective. (AR 70-10)

(A) Military Characteristics. Those characteristics of equipment upon which depend its ability to perform desired military functions. Military characteristics include physical and operational characteristics, but not technical characteristics. (AR 71-3)

(A) Military Requirement. An established need justifying the timely allocation of resources to achieve a capability to accomplish approved military objectives, missions or tasks. (AR 71-3)

(A) Military Specifications. Procurement specifications in the military series promulgated by one or more of the military agencies and used for the procurement of military supplies, equipment, or services. (AR 71-3)

(A) Minor Test Incident. An incident of concern occurring during materiel testing which involves desirable but not imperative improvement(s) to operability, durability, reliability, maintainability, transportability, or human factors aspects, and which does not have serious impact(s) on mission capability or safety. (DARCOM/DRCDE-RT)

(O) Mission Area. A segment of the defense mission as established by the Secretary of Defense. (DODD 5000.1)

(A) Mission Assignee Agency. An agency responsible for materiel management of items within specific Federal Supply classification classes. (AR 708-1)

(O) Mission Element. A segment of a mission area critical to the accomplishment of the mission area objectives and corresponding to a recommendation for a major system capability as determined by a DOD Component. (DODD 5000.1)

(O) Mission Element Need Statement (MENS). A statement prepared by a DOD Component to identify and support the need for a new or improved mission capability. The mission need may be the result of a projected deficiency or obsolesence in existing systems, a technological opportunity, or an opportunity to reduce operating cost. The MENS is submitted to the Secretary of Defense for a Milestone 0 decision. (DODD 5000.1)

(B) Mission Need means a required capability within an agency's overall purpose, including cost and schedule considerations. (A-109)

(D) Mock Up. A model, built to scale, of a machine, apparatus, or weapon. It is used in studying the construction of and in testing a new development, or in teaching personnel how to operate the actual machine, apparatus, or weapon. For example, mock ups of ships, landing craft, and aircraft are used in training personnel to load, embark and debark. (JCS PUB 1)

(A) Monitor. To observe for adherence to established procedures and report on successes and/or failures. (Not to be used in sense of supervision. Implies no responsibility except to be aware of what is happening and to raise cautions to those responsible for the activities.) (DA Pam 70-21)

(F) National Range. Department of Defense operated flight test network which, because of its size and general purpose facilities, is considered a national asset and is equally available to all United States Government sponsored range users on a common basis. Range capabilities include facilities to support tests of missiles, drones, space launch vehicles, satellites, and space probes. The Space and Missile Test and Evaluation Center, Air Force Eastern Test Range, and Air Force Satellite Control Facility are national ranges. (AFM 11-1)

(N) Navy Decision Coordinating Paper (NDCP). The NDCP is the Navy acquisition management document which supports and promulgates a CNO or SECNAV decision to initiate a conceptual development program and establish an appropriate advanced or engineering development line item. For a SECDEF or DSARC principle designated program, the NDCP will serve as the basis for the DCP or PM. NDCP format is the same as that of the DCP. (OPNAVINST 5000.46)

(A) Nondevelopment Programs. Items or systems available for procurement with no expenditure of RDTE funds. (AR 70-10)

(A) Nonmajor Systems. Those systems which do not meet the criteria for designation as major systems. (AR 70-10)

(N) Operability. See Interoperability.

(D) Operation Annexes. Those amplifying instructions which are of such a nature, or are so voluminous or technical, as to make their inclusion in the body of the plan or order undesirable. (JCS PUB 1)

(A) Operational Characteristics. Those military characteristics which pertain primarily to the functions to be performed by equipment either alone or in conjunction with other equipment (e.g., for electronic equipment, operational characteristics include such items as frequency coverage, channeling, type of modulation, and character of emission). (AR 71-3)

(A) Operational Climatic Testing (OCT). Tests addressing the upper and lower bands of the climatic spectrum, ranging from severe European winter to Mid-East summer. These tests will provide an assessment of operational suitability of a system under the climatic conditions it is most likely to encounter in actual usage. (AR 71-3)

(A) Operational Effectiveness. The overall degree of mission accomplishment of a military system used by representative troops in the context of the organization, doctrine, tactics, training, logistic support, threat, and environment in the planned operational employment of the system. (AR 71-3)

(N) Operational Effectiveness. Fundamentally, the capability of a system, when it is operating the way it is suppoed to (e.g., not broken), to perform a necessary mission/function. Operation in the presence of enemy action is assumed; hence Survivability and Vulnerability are treated as part of operational effectiveness. (COMOPTEVFOR INST 3960.1A)

(F) Operational Effectiveness. How well the system performs its intended mission in its intended environment, exclusive of system support considerations. Survivability, compatibility, and interoperability may be considerations in evaluation effectiveness. (AFR 80-14)

(O) Operational Effectiveness. The overall degree of mission accomplishment of a system used by representative troops in the context of the organization, doctrine, tactics, threat, and environment in the planned operational employment of the system. (DODD 5000.3)

(D) Operational Environment. As pertains to the military, it is a composite of the conditions, circumstances, and influences which affect the employment of military forces and which bear on the decisions of the commander. (JCS PUB 1)

(D) Operational Evaluation. The test and analysis of a specific end item or system, insofar as practicable under Service operating conditions, in order to determine if quantity production is warranted considering a. the increase in military effectiveness to be gained; and b. its effectiveness as compared with currently available items or systems, consideration being given to: (1) personnel capabilities to maintain and operate the equipment; (2) size, weight, and location considerations; and (3) enemy capabilities in the field. See also technical evaluation. (JCS Pub 1)

(N) Operational Evaluation. Operational evaluation is the analysis and interpretation of data from an operational viewpoint, for the purpose of predicting the operational effectiveness and operational suitability of a system. (COMOPTEVFORINST 3960.1A)

(A) Operational Evaluator. The designated operational tester (the command or agency responsible for operational testing (OT), or a subordinate element, which prepares the OT independent evaluation; provides the chairman for OT reliability, availability, and maintainability (RAM) scoring conferences and data aggregation meetings; and provides a principal spokesperson at all RAM scoring conferences and meetings. Operational evaluators include: The Operational Test and Evaluation Agency (OTEA); TRADOC Systems Analysis Agency (TRASANA); TRADOC schools and centers; US Army Communications Command (USACC) and Communications Electronics Engineering Installation Agency (CEEIA); and The Surgeon General (TSG). (AR 702-3, AR 71-3)

(A) Operational Feasibility Testing (OFT). A limited category of FDTE conducted by the user to permit an operational evaluation of systems developed by another service, foreign nation, or a commercial firm, and to provide input for a new Letter of Agreement (LOA), Required Operational Capability (ROC) or Letter Requirement (LR); for modification of an Outline Development Plan (DP); or initiation of a Product Improvement Proposal (PIP). (AR 70-10)

(D) Operational Readiness. The capability of a unit, ship, weapon system, or equipment to perform the missions or functions for which it is organized or designed. May be used in a general sense or to express a level or degree of readiness. (JCS PUB 1)

(N) Operational Requirement (OR). ORs are concise statements of operational needs (not to exceed 3 pages). The OR is the basic requirement document for all Navy acquisition programs requiring research and development effort. The OR solicits Development Proposals (DP) from the Naval Material Command or Bureaus, as appropriate. (OPNAVINST 5000.42)

(O) Operational Suitability. The degree to which an operationally effective system can be satisfactorily placed in field use, with consideration being given to availability, compatibility, transportability, interoperability, reliability, maintainability, safety, human factors, electromagnetic compatibility, logistic supportability, and training requirements. (DODD 5000.3)

(F) Operational Suitability. How well the system performs its intended mission when operated and maintained by military personnel in the field. This normally includes capability, availability, reliability, maintainability, logistics supportability, training requirements, and an assessment of operating and support cost impacts. (AFR 80-14)

(O) Operational Test and Evaluation. That test and evaluation conducted to estimate a system's operational effectiveness and operational suitability, as well as the need for any modifications. It is accomplished by operational and support personnel of the types and qualifications expected to use and maintain the system when deployed and is conducted in as realistic an operational environment as possible. (DODD 5000.3)

(F) Operational Test and Evaluation. Testing and evaluation (divided into initial operational test and evaluation and final operational test and evaluation and generally associated with the first major production decision) conducted in as realistic an operational environment as possible to estimate the prospective system's military utility, operational effectiveness and operational suitability. In addition, operational test and evaluation provides information on organization, personnel requirements, doctrine and tactics. Also, it may provide data to support or verify materiel in operating instructions, publications, and handbooks. (AFM 11-1)

(A) Operational Test Criteria. Expressions of the operational level of performance required of the military system to demonstrate operational effectiveness for given function during each operational test. The expression consists of the function addressed, the basis for comparison, the performance required, and the confidence level. (AR 71-3)

(A) Operational Tester. That command or agency, as designated by DCSOPS, assigned responsibility for conducting operational testing of items or systems. It derives program and budget information for operational testing (OT); writes OT portion of the coordinated test program (CTP); determines when, where, how and by whom OT will be accomplished; prepares operational test design plans; conducts or directs the conduct of OT; reports on test results; and provides independent evaluations. (AR 71-3)

(D) Operational Testing. A continuing process of evaluation which may be applied to either operational personnel or situations to determine their validity or reliability. (JCS PUB 1)

(A) Operational Testing. Testing and evaluation of materiel systems which is accomplished with typical user operators, crews, or units in as realistic an operational environment as possible to provide data to estimate: (1) the military utility, operational effectiveness, and operational suitability (including compatibility, interoperability, reliability, availability and maintainability (RAM), safety, logistic supportability, operational man (soldier)-machine interface, and training requirements) of new system; (2) from the user viewpoint, the systems desirability, considering systems already available and the operational benefits/burdens associated with the new system; (3) the need for modification to the system; and (4) the adequacy of doctrine, organization, operating techniques, tactics and training for employment of the system, adequacy of maintenance support for the system and, when appropriate, its performance in a countermeasure environment. (AR 71-3)

(D) Operationally Ready. 1. As applied to a unit, ship or weapon system- Capable of performing the missions or functions for which organized or designed. Incorporates both equipment readiness and personnel readiness. 2. As applied to personnel- Available and qualified to perform assigned missions or functions. (JCS PUB 1)

(A) Outline Acquisition Plan (OAP). An acquisition plan prepared prior to entry into the demonstration and validation phase. It is prepared by the materiel developer in coordination with the combat developer and provides a plan for management of the RDTE effort to achieve the materiel objective addressed by the LOA. (AR 70-27)

(A) Outline Test Plan (OTP). The formal document included in the FYTP which contains appropriate administrative information; the test purpose; objective, scope, and tactical context; resource requirements; and cost estimates. (AR 70-10)

(N) PAT&E (Production Acceptance T&E). PAT&E is that testing conducted on production items to demonstrate that systems meet contract specifications and requirements. Most PAT&E is the responsibility of the DA. However, acceptance trials of new construction or major conversion ships and new model aircraft are the responsibility of PRESINSURV. The specific objectives of PAT&E are published in the TEMP. (OPNAVINST 3960.10)

(A) Performance Criteria. The operational and/or technical capabilities established for an item of materiel at the time it is approved for development. (AR 70-10)

(A) Physical Characteristics. Those military characteristics of equipment which are primarily physical (e.g., weight, shape, volume, waterproofing, and sturdiness). (AR 70-10)

(A) Pilot Line Items. Items manufactured using production methods for OT III and DT III and to confirm production feasibility. These could also be considered LRIP items should the pilot line be converted to the production line. (AR 70-10)

(F) Pilot Production. A limited production run of a new system which has completed engineering development and for which the capability to mass produce the item for inventory needs to be demonstrated. (AFR 80-14)

(O) Pilot Production Item. An item that is produced from a limited production run of a new system for which engineering development has been completed and for which the capability to mass produce the item needs to be demonstrated. (DODD 5000.3)

(F) Preproduction Article. An article which is in final form, employs standard parts (or nonstandard parts approved by the agency concerned), and is representative of final equipment. (AFR 80-14)

(O) Preproduction Prototype. An article in final form employing standard parts, representative of articles to be produced subsequently in a production line. (DODD 5000.3)

(A) Preproduction Prototypes. Those engineering development prototypes manufactured for OT and DT prior to full production. These could be the prototypes tested in OT and DT II. (AR 70-10)

(O) Producibility. The degree to which articles can be replicated, given the considerations of manufacturing techniques, availability of materials and labor, and total costs. (DODD 5000.3)

(A) Product Improvement Testing. Testing to insure suitability of the proposed product improvement for Army use. (AR 70-10)

(O) Production Acceptance Test and Evaluation. Test and evaluation of
(F) production items to demonstrate that items procured fulfill the requirements and specifications of the procuring contract or agreements. (DODD 5000.3) (AFR 80-14)

(A) Production and Deployment Phase. The fourth phase of the materiel lifecycle. During this phase, operational units are trained, equipment is procured to meet the authorized acquisition objective (AAO) and is distributed in accordance with major items distribution plan (MIDP), and logistical support is provided. Product improvements are applied to the equipment and/or support system when they are required by operational experience or to employ new technology and doctrine. A table of organization and equipment (TOE), table of distribution of allowance (TDA), and common table of allowance (CTA) are refined or modified as required. (AR 70-10)

(N) Production Reliability Design Review (PRDR). a. The PRDR is a formal technical review to obtain mutual agreement between the developing agency, the test agency, the contractor(s), and the vendor(s), that the system's established reliability is or is not acceptable to support commencement of production and deployment. The PRDR does not replace and should not be confused with preliminary design reviews, critical design reviews, program milestone reviews, and pre-IOT&E test readiness reviews. b. The PRDR is of short duration (one to two days), and involves a large magnitude and variety of technical data. Consequently, the review team cannot cover the entire program in depth; rather, confidence in the effectiveness of the review is gained through the participants understanding recognized problems, assessing the efficacy of corrective actions, and probing for soft areas in the technical story and in the documentation. (NAVMATINST 3900.13)

(A) Production Validation Test-Contractor (PVT-C). A test conducted by a contractor during initial production to demonstrate test contract materiel requirements have been met, prior to subsequent Government testing. (DA Pam 70-21)

(A) Production Validation Test-Government (PVT-G). A test conducted by Government during initial production to independently validate contractor test results (only when essential) and execute those tests beyond the capabilties of the contractor. This test is the final verification test prior to production and deployment. (DA Pam 70-21)

(B) Program means an organized set of activities directed toward a common purpose, objective, or goal undertaken or proposed by an agency in order to carry out responsibilities assigned to it. (A-109)

(F) Program Introduction (PI). Document prepared by a potential user to identify test support required from a test organization. (AFSC/TE)

(F) Program Management Directive (PMD). The official HQ USAF management directive used to provide direction to the implementing and participating commands and satisfy documentation requirements. It will be used during the entire acquisition cycle to state requirements and request studies as well as initiate, approve, change, transition, modify or terminate programs. The content of the program management directive, including the required HQ USAF review and approval actions, is tailored to the needs of each individual program. (AFM 11-1)

(F) Program Management Plan (PMP). The document developed and issued by the program manager which shows the integrated time-phased tasks and resources required to complete the task specified in the program management directive. The program management plan is tailored to the needs of each individual program. (AFM 11-1)

(A) Program Manager. An individual, chartered by the Secretary of the Army, who is assigned the responsibility and is delegated the full-line authority for the centralized management of a specified development/acquisition program. (AR 70-17)

(F) Program Manager. The single Air Force manager during any specific phase of the system life cycle. (Program Manager or System Manager/Item Manager). (AFR 80-14)

(O) Program Manager. The individual in the DOD chartered to manage a major system acquisition program. (DODD 5000.1)

(O) Program Manager Charter. A document approved by the DOD Component Head stating the program manager's responsibility, authority and accountability in the management of a major system acquisition program. (DODD 5000.1)

(A) Program Memorandum (PM). See Army Program Memorandum and Defense Program Memorandum.

(F) Program Memorandum (PM). An Office of the Secretary of Defense document prepared with similar format, content and coordination as the development concept paper but documents program guidelines and thresholds for those significant development programs which are not subject to specific development concept paper action. (AFM 11-1)

(N) Program Memorandum (PM). Each military component or each DSARC principal has the authority to select non-major programs for special management monitoring. In such circumstances, a PM serves the same function for that principal as does the DCP for the DEPSECDEF for major programs. Within the Navy, the format, content, and processing for a PM are identical to those for a DCP. (OPNAVINST 5000.46)

(B) Program Objectives. The capability, cost and schedule goals being sought by the system acquisition program in response to a mission need. (A-109)

(O) Program Reviews (Scheduled).
- Milestone 0 - Program Initiation.
- Milestone I - Demonstration and Validation.
- Milestone II - Full-scale Engineering Development.
- Milestone III - Production and Deployment.

(DODD 5000.1)

(A) Project Manager (PM). An individual chartered by the Secretary of the Army who is assigned the responsibility and delegated the full-line authority for the centralized management of a specified development/acquistion project. (AR 70-17)

(A) Proponent Materiel Developer. The DARCOM Major Subordinate Commands (MSC) (including subordinate installations and activities); Readiness and development Commands (RDC); Program/Project/Product Managers (PM) and Laboratories (LAB) reporting directly to Headquarters, DARCOM (MSC/RDC/PM/LAB), responsible for research, development, and production validation of an item (including the system for its logistic support) which respond to DA objectives and requirements. (AR 70-1)

(F) Prototype. First full-scale functional form of a new system, subsystem, or component, on which the design of subsequent production items is patterned. (AR 80-14)

(A) Prototype Qualification Test-Contractor (PQT-C). A test conducted by a contractor during the Full-Scale Development Phase on components, subsystems, and/or systems to demonstrate that contract materiel requirements have essentially been met, and to provide a significant degree of confidence that the materiel will successfully undergo and complete essential, subsequent Government testing. (DA Pam 70-21)

(A) Prototype Qualification Test-Government (PQT-G). A test conducted by the Government during the Full-Scale Development Phase (only when essential), to independently validate contractor test results and execute those tests beyond the capabilities of the contractor. This test is final verification test prior to a production decision. (DA Pam 70-21)

(F) Qualification OT&E. That portion of OT&E conducted on those systems which have not undergone a formal research and development effort and are not funded in the RDT&E appropriation. The testing is conducted in lieu of IOT&E on the first article and is normally completed prior to Air Force acceptance. (AFR 80-14)

(F) Qualification Test and Evaluation (QT&E). Testing conducted on those systems which do not have a formal R&D phase and are not funded by the RDT&E appropriation. The testing is conducted in lieu of DT&E. (AFR 80-14)

(F) Qualification Tests. Those tests that verify the design and manufacturing process and thus provide a baseline for subsequent acceptance tests. Qualification testing is conducted to accomplish two separate functions:

a. Preproduction Qualification Tests. A series of formal contractual tests are conducted to insure design integrity over the specified operational and environmental range. The test should be conducted on prototype or preproduction items fabricated to the proposed production design specifications and drawings. These tests are a constraint to production release on programs which involve volume acquisition. The preproduction qualification tests include those contractual reliability and maintainability demonstration tests required prior to production release.

b. Production Qualification and Acceptance Tests. A series of formal contractual tests are conducted to insure the effectiveness of the manufacturing process, equipment, and procedures. These tests are conducted on a sample taken at random from the first production lot, and are repeated if the process is changed significantly and when a second or alternate source is brought on line. (AFR 80-14)

(F) Quality Control. That management function by which conformance to established standards is assured, performance is measured, and in the event of defects, corrective action is initiated. (AFM 11-1)

(A) Reconditioning Tests.

a. Pilot Reconditioning Testing. These are tests conducted on an item(s) to verify the adequacy, completeness and accuracy of the technical requirements, Depot Maintenance Work Requirement (DMWR), Technical Manual (TM) and Technical Bulletin (TB) processes, facilities, equipment and materiels that will be used in volume reconditioning operations.

b. Initial Reconditioning Test (First Article). These are tests conducted on an item(s) to verify the quality of the materiel when reconditioned under volume (rate) procedures and practices.

c. Control Test. These are tests conducted on item(s) selected at periodic intervals from the volume reconditioning operations to determine if there has been any degradation of quality.

d. In-process Testing. These are tests performed during the rework/repair cycle to ensure that required repairs are being accomplished satisfactorily.

e. Final Acceptance Testing. These are tests performed after work has been completed to ensure that required reconditioning has been accomplished satisfactorily and the end item or product meets established technical requirements. This test is considered to be the reconditioning acceptance test.

f. Total System Test. These are tests conducted on the system/item in the configuration that it is operated in by the user. A system test will include testing of the major end item assembly, the support equipment and basic items of issue.

g. Base Line Evaluation Tests (BET). These are tests conducted simultaneously on reconditioned items and new production items of the same configuration to provide a basis for comparing performance. Likewise, they provide information as to the degree of reconditioning required to restore an item to an established level of performance. (AR 702-10)

(N) Reliability. The probability that an item will perform its intended function for a specified interval under stated conditions. (MIL STD 721B)

(F) Reliability.

a. Hardware Reliability. Hardware reliability is the probability that a part, component, subassembly, assembly, subsystem, or system will perform for a specified interval under stated conditions with no malfunction or degradation that requires corrective maintenance actions. (AFR 80-5)

b. Logistics Reliability. A measure of a system's ability to operate as planned under the defined operational and support concepts using specified logistics resources (e.g., spares or manpower). Logistics reliability may be expressed as mean time between maintenance (MTBMA), mean time between removal (MTBR), or mean time between demand (MTBD). Logistics reliability recognizes the effect of all occurrences which place a demand on the logistics support system even when mission capability is unaffected. (AFR 80-5)

c. Mission Reliability. A measure of the ability of a system to complete its planned mission or function. Mission reliability may be expressed as mission completion success probability (MCSP), mean mission duration (MMD), or as mean time between critical failure (MTBCF), as appropriate. (AFR 80-5)
d. Operational Reliability, The probability that an operationally ready system will perform as required to accomplish its intended mission or function as planned. (AFR 80-5)

(O) Reliability. A fundamental characteristic of an item of materiel expressed as the probability that it will perform its intended function for a specified period of time under stated conditions. (DODD 5000.3)

(A) Required Operational Capability (ROC). An HQDA document which states concisely (normally in four pages or less) the minimum essential operational, technical, logistical, and cost information necessary to initiate full-scale development or acquisition of a materiel system. (AR 71-9)

(F) Research and Development Categories. Major categories are:
(1) Program VI--research and development:
(a) Research. Includes all scientific study and experimentation directed toward increasing knowledge and understanding in those fields of the physical, engineering, environmental, biological-medical, and behavioral-social sciences directly related to explicitly stated long-term national security needs.
(b) Exploratory development. Includes all efforts directed toward the solution of specific military problems, short of major development projects.
(c) Advanced development. Includes all projects which have moved into the development of hardware for experimental or operational test. It is characterized by line item projects, and program control is exercised on a project basis.
(d) Engineering development. Includes those development programs being engineered for service use but which have not yet been approved for procurement or operation.
(e) Management and support. Includes research and development effort directed toward support of installations or operations required for general research and development use. Included are test ranges, military construction not included elsewhere, and operation and maintenance of test aircraft.
(2) Programs other than Program VI. Operational systems development. Includes a development effort directed toward development, engineering, and test of systems, vehicles, weapons, and support programs that have been approved for production and service employment. (AFM 11-1)

(F) Research Testing. Operations performed as a part of research experiments and investigations to measure, verify, or assess phenomena, hypotheses, results of experimentation, and to gain new knowledge. (AFM 11-1)

(A) Safety Confirmation Letter. A letter, separately issued by the development tester to the materiel developer, which states that the item or system conforms to all safety requirements and specifies precisely what those safety requirements are. (AR 71-3)

(A) Safety Release. A document provided by DARCOM prior to Government testing involving use of troops, summarizing the safety findings of development tests, and describing the system hazards and the associated technical and operational limitations and precautions. (AR 385-16)

(A) Safety Statement. A formal, comprehensive safety report that summarizes the safety data that has been collected and evaluated during the life-cycle before a test of an item. It expresses the considered judgement of the proponent materiel developer regarding the hazard potential of the item and any actions or precautions that are recommended to minimize these hazards and to reduce the exposure of personnel and equipment to them. (AR 385-16)

(N) Science and Technology Objectives (STO). The STOs describe in broad terms the Navy's needs and problems requiring R&D solutions, and are based on the Navy's role, objectives and threat anticipated in the 10 to 20 year future time frame. (OPNAVINST 5000.42)

(F) Self-Test. A test or series of tests performed by an equipment upon itself, which shows whether or not it is operating within designated limits. (AFM 11-1)

(F) Semiautomatic Test Equipment. Any testing device which requires human participation in the decision making, control, or evaluative functions. (AFM 11-1)

(O) (Service) System Acquisition Review Council ((S)SARC). A Council established by the Head of a Military Department as an advisory body to him and through him to the Secretary of Defense on major system acquisitions. The (S)SARC is chaired by the Secretary/Under Secretary of the Military Department and is similar in functional composition, responsibilities and operation to the DSARC. In application the term (Service) is replaced by the designation of the applicable Military Department, i.e., ASARC, NSARC, and AFSARC. (DODD 5000.1)

(D) Service Test. A test of an item, system of materiel, or technique conducted under simulated or actual operational conditions to determine whether the specified military requirements or characteristics are satisfied. See also tests. (JCS PUB 1)

(F) Service Test. NSA uses the term service test for testing that a military service performs on NSA-developed COMSEC equipment to verify compliance with their requirements before the major production decision. Service tests are considered combined test programs. (AFR 80-14)

(F) Service Test Model. A model used to determine the characteristics, capabilities and limitations of a piece of equipment of a complete system under either simulated or actual service operational conditions. (AFM 11-1)

(F) Shake-Table Test. A laboratory test in which an instrument component is placed in a vibrator that simulates one of the conditions during the launch of a missile or other vehicle. (AFM 11-1)

(F) Simulated-Operations Testing. That operational testing needed by the Air Force to (1) support statements of new requirements and (2) support positions and programs. (AFM 11-1)

(F) Software.

a. Software Maintainability. Those characteristics of software which affect the ability of software engineers to remove errors, add features/capabilities through computer program changes, delete features from programs, and modify software to be compatible with hardware changes.

b. Software Performance Testing. A determination of the extent to which software performs in accordance with specifications and requirements and, thereby, contributes to the effectiveness of the system in which it is embedded.

c. Software Suitability. The extent to which computer resources can be used and maintained by Air Force personnel with consideration being given to maintainability, support resources, performance of system support software, operator interfaces, and hardware/software interfaces.

d. Software Verification. A stepwise process which ensures satisfactory progress and performance within each software development phase and between successive development phases.

e. Software Validation. A test and evaluation process which ensures that computer programs satisfactorily perform in the mission environment the functions for which it was designed, thereby, satisfying software requirements, system requirements, and user's needs.

f. Independent Verification and Validation (IV&V). A software verification/validation effort performed by an independent agency. (AFR 80-14)

(A) Special Study Group (SSG). A group, normally composed of representatives of HQDA, combat developer, operational tester, materiel developer, logistician, and trainer, and the project manager designee, which is convened to conduct analysis, insure inclusion of all alternatives within an analysis, monitor experimentation, or undertake other such tasks that may require the concentration of special expertise for a short duration. (AR 71-9)

(A) Special Task Force (STF). A group that is normally composed of the chartered task force director and representatives of the user, materiel developer, trainer, combat developer, HQDA, and operational tester, and the project manager designee. This task force conducts an indepth investigation of the need for the system described in the requirements documents and of any necessary alternative system designs, monitors experimentation, and arrives at a recommended approach to provide the system described in an approved ROC document. (AR 71-9)

(F) Statement of Capabilities (SC). Formal response to PI by test agency listing cost and capability to support test. (AFSC/TE)

(F) Statement of Operational Need (SON). A formal numbered document used to identify an operational deficiency and state the need for a new or improved capability for USAF forces. Operational needs are based on short-term and long-term capability objectives and may result from a projected deficiency or obsolescence in existing capabilities, a technological opportunity, or an opportunity to reduce operating/support cost. The SON document and supporting attachments permit the originator to identify specific deficiencies. It provides the basic justification to initiate major and nonmajor systems acquisition or modification proposals. (AFR 80-14)

(A) Suitability. A subjective determination by a decision authority that a developmental materiel system does or does not meet minimum standards prequisite to satisfactory field service use. The judgement may be based on the presence or absence of uncorrectable materiel deficiencies, and/or the number and assessed importance of correctable and uncorrectable shortcomings. It also includes judgements on non-materiel issues. (AR 71-3)

(N) Supervising Authority. The Officer designated by the Commander, Naval Ship Systems Command to represent the Navy Department at a shipyard; normally, he is the Supervisor of Shipbuilding, Conversion and Repair or the Commander, Naval Shipyard. (OPNAVINST 4700.8F)

(F) Support Equipment. All additional equipment, including automatic test equipment and related software, required to install, launch, guide, control, direct, inspect, test, adjust, calibrate, appraise, gauge, measure, assemble, disassemble, handle, transport, safeguard, store, actuate, service, repair, overhaul, maintain, or operate the system. (AFSC/TE)

(A) Supportability. That characteristic of materiel which quantified its ability to adapt to changing supply and maintenance concepts. (AR 71-3)

(F) Supporting Command. A command that provides direct support to a system or test program. Normally refers to AFLC, USAFSS, and ARC in their role as logistics support and training organizations. (AFR 80-14)

(A) Surveillance Tests. These are destructive and/or nondestructive tests of assemblies, components and parts which are susceptible to deterioration in storage. (AR 702-10)

(O) Survivability. The degree to which a system is able to avoid or withstand a man-made hostile environment without suffering an abortive impairment of its ability to accomplish its designated mission. (DODD 5000.3)

(N) Survivability. The capability of a weapons system to withstand a man-made hostile environment without suffering an abortive impairment of its designated mission. (NAVMATINST 3924A)

(F) Survivability. The capability of a system to withstand a man-made hostile environment without suffering an abortive impairment of its ability to accomplish its designated mission. (AFM 11-1)

(A) Susceptibility. The degree to which a device, equipment, or weapons system is open to effective attack due to one or more inherent weaknesses. (AR 71-3)

(A) System. An integrated relationship of components (personnel, training, logistics, hardware, and procedures) alined to establish proper functional continuity toward the successful performance of a defined task or tasks. (AR 71-3)

(F) System. A composite of equipment, skills, and techniques capable of performing and/or supporting an operational role. A complete system includes related facilities, equipment, materiel, services, and personnel required for its operation to the degree that it can be considered a self-sufficient unit in its intended operational and/or support environment. See also system program office; system support manager; system life cycle. (AFM 11-1)

(B) System Acquisition Process means the sequence of acquisition activities starting from the agency's reconciliation of its mission needs, with its capabilities, priorities and resources, and extending through the introduction of a system into operational use or the otherwise successful achievement of program objectives. (A-109)

(O) System Acquisition Process. A sequence of specified decision events and phases of activity directed to achievement of established program objectives in the acquisition of Defense systems and extending from approval of a mission need through successful deployment of the Defense system or termination of the program. (DODD 5000.1)

(B) System Design Concept means an idea expressed in terms of general performance, capabilities, and characteristics of hardware and software oriented either to operate or to be operated as an integrated whole in meeting a mission need. (A-109)

(F) System Effectiveness. A measure of the extent to which a system may be expected to achieve a set of specific mission requirements expressed as a function of availability, dependability, and capability. (AFM 11-1)

(F) System Operational Concept. A formal document that describes the intended purpose, employment, deployment, and support of a system. It assists in identifying the variables associated with satisfying the operational need and provides initial guidance to operating forces for employing the new or improved system. It provides information for posturing combat forces and specifies standards for deployment, organization, basing, and support from which detailed resource requirements and implementing programs can be derived. It must be compatible with long-range Air Force goals and objectives and consistent with Air Force strategy, force structure, concepts for the future employment of aerospace forces, and current and emerging doctrine. Prior to full scale engineering development, it contains, as an integral part, the maintenance concept prepared per AFR 66-14. (AFR 80-14)

(F) System Program Director. A designated individual assigned the responsibility and delegated the authority for the centralized management of a particular system program. Also known as system program manager. (AFM 11-1)

(O) System Program Office. The office of the program manager and the single point of contact with industry, Government agencies and other activities participating in the system acquisition process. (DODD 5000.1)

(F) System Program Office. The organization comprised of technical and business management and administrative personnel assigned full time to a system program director. The office may be augmented with additional personnel from participating organizations. (AFM 11-1)

(F) Systems Source Selection Board. The board evaluates and recommends to Headquarters United States Air Force on preferred sources for developing and production of a weapon system. (AFM 11-1)

(D) Technical Evaluation. The study and investigations by a developing agency to determine the technical suitability of materiel, equipment, or a system, for use in the military Services. See also operational evaluation. (JCS PUB 1)

(A) Technical Feasibility Test (TFT). Testing to provide test data for a technical evaluation and assessment of items or system developed by another service, foreign nation, or a commercial firm. (AR 70-10)

(D) Technical Information. Information, including scientific information, which relates to research, development, engineering, test, evaluation, production, operation, use, and maintenance of munitions and other military supplies and equipment. (JCS PUB 1)

(O) Technology Assessment Annex. A one page description of technological risks remaining in a system program and the plans to address these risks. (DODD 5000.1)

(D) Telecommunication. Any transmission, emission, or reception of signs, signals, writing, images, and sounds or information of any nature by wire, radio, visual, or other electromagnetic systems. (JCS PUB 1)

(D) Telemetry Intelligence. Technical and intelligency information derived from the intercept, processing, and analysis of foreign telemetry. Also called TELINT. (JCS PUB 1)

(A) Test. A process by which data are accumulated to serve as a basis for assessing the degree that a system meets, exceeds, or fails to meet the technical or operational properties ascribed to the system. (AR 71-3)

(F) Test. Any program or procedure which is designed to obtain, verify, or provide data for the evaluation of: research and development (other than laboratory experiments); progress in accomplishing development objectives; or performance and operational capability of systems, subsystems, components, and equipment items. (AFR 80-14)

(O) Test and Evaluation Master Plan. An overall test and evaluation plan, prepared as early as possible in the acquisition process, and designed to identify and integrate objectives, responsibilities, resources, and schedules for all test and evaluation to be accomplished prior to the subsequent key decision points. (DODD 5000.3)

(N) Test and Evaluation Master Plan (TEMP). The TEMP is the controlling management document which defines the test and evaluation for each acquisition program. As such, it contains the integrated requirements of the DA (for DT&E) and COMOPTEVFOR (for OT&E), and the schedule and resources required for accomplishment. (OPNAVINST 3960.10)

(F) Test and Evaluation Master Plan (TEMP). An overall test and evaluation plan designed to identify and integrate the effort and schedules of all T&E to be accomplished in connection with an acquisition program. (AFR 80-14)

(A) Test Command or Agency. The command or agency that is responsible for the test or test management. (AR 71-3)

(O) Test Criteria. Standards by which test results and outcome are judged. (DODD 5000.3)

(A) Test Design Plan (TDP). A formal document approved by the test organization which states the circumstances under which a test is executed, the data required from the test, and the means of handling test data. (AR 70-10)

(F) Test Directive. A HQ USAF document which provides direction and guidance for OT&E for those cases not covered by PMD. (AFR 80-14)

(F) Test Director. A person assigned to conduct a test in accordance with the test plan, and who exercises overall responsibility for achieving test plan objectives. (AFR 80-14)

(A) Test Directorate. A temporary organization formed to conduct a test. (AR 71-3)

(F) Test Equipment. Electric, electronic, mechanical, hydraulic, or pneumatic equipment, either automatic, manual or any combination thereof, which is required to perform the checkout function. (AFM 11-1)

(D) Test Force. The group responsible for conducting test and evaluation activities requiring participation by more than one agency. The requirement for a test force and designation of participants is noted in appropriate system or project documentation, and applies primarily to system testing activities; it may also be applicable to project or engineering service efforts, however, when large scale operations are involved. (RCC 104-64)

(A) Test Integration Working Group (TIWG). An informal working group chaired by the materiel developer to assist the developer in the preparation of the Coordinated Test Program (CTP), to monitor the test program progress, and to update the CTP as required. (DA PAM 70-21)

(A) Test Objective. Some of the purposes for which the test is conducted, embodying a logically related set of test-answerable and interdependent issues. The objective implies the scope of the inquiry. (AR 71-3)

(A) Test Organization. The organization designated in the outline test plan for conducting the test. (AR 71-3)

(F) Test Plan. An implementation document which provides the information necessary for the conduct of a given test, demonstration, or exercise. (AFR 80-14)

(F) Test Planning Working Group (TPWG). The TPWG is the focal point for all test planning activities and is composed of representatives from all organizations involved in the test program. The TPWG acts as an advisory body to the program manager on test matters throughout the life of the program. (AFSC/TE)

(F) Test Program Outline. The basic resource management document for operational testing which is used throughout the test planning process. It identifies resources required to support testing and is the basis for budget submissions, manpower planning, and procurement lead time. (AFR 80-14)

(A) Test Proponent. The command or agency, as designated by HQDA, which has been assigned the primary responsibility for testing of materiel systems or concepts and/or requiring test results. (AR 71-3)

(A) Test Report. A document which contains the data obtained from executing the test, describes the conditions that actually prevailed during testing and data collection, and contains a comparison of test results with test objectives. (AR 70-10)

(A) Test Schedule and Review Committee (TSARC). A DA committee which recommends test priorities, coordinates resources for support of user testing, resolves conflicts between test requirements and other missions, and recommends approval of the FYTP. (AR 71-3)

(F) Test Stand. A facility for testing the performance of engines or mechanisms. (AFM 11-1)

(F) Testing Time. The time required to determine whether designated characteristics of a system are within specified values. (AFM 11-1)

(A) Threat Test Support Package. A statement of the actual expected threat for the tested system. The package may also contain specially constructed threat hardware. (AR 71-3)

(O) Thresholds. Monetary, time, or resource limitations placed on a program, to be used as guides as the program progresses and the breaching of which is cause for careful review of at least some aspects of the program. (DODD 5000.3)

(N) Total Ship Test Director. The Total Ship Test Director (TSTD) is responsible to the SHAPM for organizing, planning, managing and controlling the Total Ship Test Program for the acquisition of a specific ship or ship class. As such, he will assign, direct and coordinate the efforts of the test development organization. The TSTD will usually be a member of the SHAPM's staff or an activity directly tasked by the SHAPM. (NAVMAT 3960.7A)

(A) Trainer. The command or agency responsible for the development and conduct of the training which will provide the skills necessary to operate and logistically support materiel system being developed or otherwise acquired. (For most equipment, this is TRADOC). (AR 71-3)

(A) Training Test Support Package. Used to train user troops for testing and to plan data collection in the area of training requirements. (AR 71-3)

(O) Transportability. The inherent capability of an item to be moved
(F) efficiently over railways, highways, waterways, oceans, or airways, either by carrier, towing, or self-propulsion. (DODD 5000.3) (AFR 80-14)

(A) Type Classification. Identifies the lifecycle status of a materiel system by the assignment of a type classification designation and records the status of a materiel system in relation to its overall life history as a guide to procurement, authorization, logistical support, assets, and readiness reporting. (AR 71-6)

(A) Typical User Troops. User operators, crews, or units of the type and with the qualifications of those expected to use and maintain the system when it is deployed. (AR 71-3)

(A) User. The command, organization, or unit designated to receive the materiel system from production for use in accomplishing a designated mission. The materiel system is included in the user's TOE, TDA, or in appropriate common table of allowance (CTA). The user provides guidance to the materiel acquisition process on matters pertaining to the expected operational employment and logistic support. (The designated "user representative" normally acts as the user during the materiel acquisition process.). (AR 71-3)

(A) User Representative. The combat developer designated to represent the user during the materiel acquisition process. The user representative accomplishes this by ascertaining the needs of the user in order to influence constructively the design of the materiel system, and to insure that new or appropriate product improved materiel systems meet those needs. The command or agency filling this role represents the "mission-oriented" user and the "logistics-oriented" user by concerning itself with both the operational and logistics support aspects of materiel systems. (AR 71-3)

(A) User Testing. A generic term encompassing operational testing (OT) and force development testing and experimentation (FDTE). (AR 70-10)

(A) Using Command. The command responsible for system employment. (AFSC/TE)

(A) Validation Phase. The second phase in the materiel life-cycle. This phase consists of those steps that are necessary to resolve or minimize special logistic problems identified during the conceptual phase, verify preliminary design and engineering, accomplish necessary planning, fully analyze trade-off proposals, and prepare contracts as required for full-scale development. The validation phase may include the use of advanced development prototypes in development and operational tests. The validation process may be conducted using competitive or single contractors or by in-house laboratories. (AR 71-3)

(O) Vulnerability. The characteristics of a system which cause it to
(F) suffer a definite degradation (incapability of performing the designated mission) as a result of having been subjected to a certain level of effects in an unnatural (man-made) hostile environment. (DODD 5000.3) (AFR 80-14)

(N) Vulnerability. The characteristics of a system which cause it to suffer a finite level of degradation in performing its mission as a result of having been subjected to a certain level of threat mechanism in a man-made hostile environment. (NAVMATINST 3920.4A)

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