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BALLISTIC MISSILE DEFENSE

GLOSSARY

VERSION 3.0

JUNE 1997

DEPARTMENT OF DEFENSE BALLISTIC MISSILE DEFENSE ORGANIZATION 7100 DEFENSE PENTAGON WASHINGTON, DC 20301-7100

PREFACE AND ACKNOWLEDGMENTS

PURPOSE

The purpose of this glossary is to facilitate a common language within the Ballistic Missile Defense Organization (BMDO) and the ballistic missile defense community. This glossary supplements other existing Department of Defense (DoD) publications.

SCOPE

This glossary is not an official DoD publication; it is limited to terminology that relates to ballistic missile defense. A number of computer, software, and engineering terms are included, especially those applicable to BMD. In addition, numerous acquisition terms are included in light of BMDO's ongoing transition to a more acquisition-oriented agency. Many entries are taken from the DoD 5000-series of directives, the DoD program objective memorandums, the Joint Staff Glossary (Joint Pub 1-02), and the Defense Systems Management College Glossary. A number of outdated or seldom-used terms are also included for historical relevance, though obsolete terms are denoted.

WORLD WIDE WEB

The BMDO Glossary can be found on the BMDO World Wide Web home page at http://www.acq.osd.mil/bmdo/bmdolink/html/

FORMAT

All entries are listed in alphabetical order, including acronyms (which are cross-referenced with their corresponding definition). General terms are defined in a BMD context where appropriate. In cases where a term has more than one BMD-related meaning, multiple definitions are given. Wherever possible, organizational changes occurring since publication of the October 1995 BMDO Glossary are incorporated. Please note that abbreviations and acronyms listed herein are capitalized for ease of reference. This does not imply that they are capitalized in general usage.

BMDO/SRE wishes to thank those whose efforts and support contributed to the timeliness and relevance of this revision.

BMDO Glossary, ver. 3.0 supersedes the BMDO Glossary dated October 1995.

Select the alphabetical area of interest:

The Ballistic Missile Defense Glossary Changes or Corrections

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The Ballistic Missile Defense Glossary is most useful when it is current; however, the nature of our program makes this difficult. When proposing changes to the glossary, please keep in mind the purpose of the glossary is to facilitate a common language within the Ballistic Missile Defense Organization (BMDO) and the ballistic missile defense community and content is limited to terminology that relates to ballistic missile defense.

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Notes

A Spec System Specification.

A&T Acquisition and Technology.

A&T Acquisition and Technology.

A/BPI Ascent/Boost-Phase Interceptor.

A/C Aircraft.

A/D 1. Analog to Digital. 2. Arm/Disarm.

A/P Active/Passive.

AA See Attack Assessment.

AAA 1. Antiaircraft Artillery. 2. Assign Alternate Area. 3. AEGIS Acquisition Agent.

AAAW Air-launched Anti-Armour Weapon (UK RAF term)

AABCP Advanced Airborne Command Post.

AABNCP Advanced Airborne National Command Post

AACC Airborne Alternate Command Center.

AACT Airborne Atmospheric Compensation and Tracking [Program]

AADC Area Air Defense Commander.

AADCOM Army Air Defense Commander.

AAE Army Acquisition Executive.

AAED Advanced Airborne Expendable Decoy.

AAFCE Allied Air Forces Central Europe.

AAM Air-to-Air Missile

AAR After Action Review (USA term)

AASERT Augmentation Award for Science and Engineering Research Training.

AASP Advanced Airborne Sensor Platform.

AAT Architecture Analysis Tool.

AAT-PP Architecture Analysis Tool - Post Processor.

AAW Anti-Air Warfare.

AAWC Anti-Air Warfare Commander.

AB Air Base

Abacus Distributed real-time multi-element test environment for HWIL.

ABCCC 1. Airborne Battlefield Command and Control Center. (US C-130 aircraft)

2. Airborne Communications Command and Control Platform (JFACC term)

ABCS 1. Army Battle Command System (USA term).

2. Advanced Beam Control System.

ABCT ASARC/BMDARC Coordination Team.

ABE Army Background Experiment (flew aboard the LACE spacecraft).

ABIS Advanced Battlespace Information System.

ABL 1. Airborne Laser. 2. Aircraft Based Laser. 3. Armored Box Launcher.

Ablative Shield A shield made of material that vaporizes when heated, absorbing thermal energy and

protecting the shielded object from heat damage.

Ablative Shock A mechanical shock wave at the surface of an object exposed to intense pulsed electro-

magnetic radiation. A thin layer of the object's surface violently and rapidly boils off; the resulting vapor suddenly exerts pressure against the surface, generating a pressure wave at the surface. This shock wave then propagates through the material and can

cause melting, vaporization, spallation, and structural failure of the object.

ABM See Anti-Ballistic Missile.

ABM Treaty Anti-Ballistic Missile Treaty of 1972, signed and ratified by the (former) Soviet Union

and the United States, limiting deployment on each side to one site comprising 100 interceptors, 100 launchers, and several ground-based radars. The Treaty also regulates

development and testing.

ABM-X-3 A terminal Soviet anti-ballistic missile (ABM) defense system using transportable

phased-array radars and both long and short-range, high acceleration interceptors similar to the U.S. Sprint. This system was developed and tested in the 1970's and early 1980's.

ABMDA OBSOLETE. Advanced Ballistic Missile Defense Agency.

ABNCP Airborne National Command Post.

ABO Agent of Biological Origin (NBC term).

ABT Air-Breathing Threat.

ACA 1. Airspace Control Authority.

2. Associate Contracting Agreement (Contracting term).

ACAP Advanced Capabilities.

ACAT Acquisition Category (DD 5000 term).

ACAT I Acquisition Category One.

ACBA Airborne Communications Bus Architecture (USAF term).

ACC 1. Air Combat Command (USAF), Langley AFB, VA.

2. Access Control Center. 3. Air Component Commander.

4. Area Coordination Center.

Accidental Launch

An unintended launch which occurs without deliberate national design as a direct result of a random event, such as mechanical failure, a simple human error, or an unauthorized

action by a subordinate. (USSPACECOM)

ACCS 1. Air Command and Control System.

2. Automated Command and Control System (USN AN/TSQ-73)

3. Airspace Command/Control System.

ACCT Application of Common Characteristics and Testability (USA CECOM term).

ACDA Arms Control and Disarmament Agency (US).

ACDS Advanced Combat Direction System (USN term).

ACDT See Advanced Concept Technology Demonstration.

ACE 1. Anti-Radiation Missile (ARM) Countermeasure Evaluator.

2. Aviation Combat Element. 3. Airborne Command Element (USAF, JFACC).

4. Allied Command Europe. 5. Arrow Continuing Experiment.

6. Analysis Control Element (Intelligence term).

7. Asset Configuration Editor.

ACEC Ada Compiler Evaluation Capability.

ACEIT Automated Cost Estimating Integrated tool.

ACES Arrow Continuation Experiments.

ACETEF Air Combat Environment Test and Evaluation Facility (USAF).

ACIM Availability Centered Inventory Model.

ACIS 1. Arms Control Impact Statement. 2. Automated Control of Industrial Systems

ACL Advanced Computer Laboratory.

ACM 1. Air Combat Maneuvering. 2. Attitude Control Motor.

ACMREQ Airspace Control Means Request (JFACC term).

ACO 1. See Administrative Contracting Officer. 2. Airspace Control Order (JFACC term).

ACOM Atlantic Command.

ACoS Army Chief of Staff.

ACP 1. Airspace Control Plan (JFACC term). 2. Army Cost Position.

ACQ See Acquisition.

Acquire 1. When applied to acquisition radars, to detect the presence and location of a target in

sufficient detail to permit identification. 2. When applied to tracking radars, to position a radar beam so that a target is in that beam to permit the effective employment of

weapons. (See Target Acquisition.)

Acquisition (ACQ)

1. (Sensor) The results of processing sensor measurements to produce object reports of interest to the system. 2. (Material) The conceptualization, initiation, design, development, testing, contracting, production, deployment, logistic support, modification, and disposal of weapons and other systems, supplies or services to satisfy DoD needs in support of military missions.

Acquisition Categories

Categories established to facilitate decentralized decision making and execution and compliance with statutorily imposed requirements. The categories determine the level of review, decision authority, and applicable procedures.

- 1. Acquisition Category I. These are "major defense acquisition programs." They have unique statutorily imposed acquisition strategy, execution, and reporting requirements. Milestone decision authority for these programs is: (a) the Under Secretary of Defense for Acquisition and Technology -- acquisition category ID; (b) if delegated by the Under Secretary, the Cognizant DoD Component Head -- acquisition category IC; (c) if delegated by the Component Head, the Component Acquisition Executive.
- 2. Acquisition Category II. Milestone decision authority for these programs is delegated no lower than the DoD Component Acquisition Executive. They have unique statutorily imposed requirements in the test and evaluation area
- 3. Acquisition Category III and IV. The additional distinction of acquisition categories III and IV allow DoD Component Heads to delegate milestone decision authority for these programs to the lowest level deemed appropriate within their respective organizations.

Acquisition Decision Memorandum (ADM) A memorandum signed by the milestone decision authority that documents decisions made and the exit criteria established as the result of a milestone decision review or inprocess review.

Acquisition Field of View (FOV) The instantaneous volume viewed by the interceptor's sensor during the process of searching its assigned volume.

Acquisition Program

A directed, funded effort that is designed to provide a new or improved materiel capability in response to a validated need.

Acquisition Program Baseline (APB) Acquisition program baselines embody the cost, schedule, and performance objectives for the program. The APB is approved by the milestone decision authority milestone reviews as follows:

- Concept Baseline, approved at Milestone I, applied to the effort in Phase I, Demonstration and Validation.
- Development Baseline, approved at Milestone II, is applied to the effort in Phase II, Engineering and Manufacturing Development.
- Production Baseline, approved at Milestone III, is applied to the effort in Phase III, Production and Deployment.

Each baseline must contain objectives for key cost, schedule, and performance parameters. Objectives are accompanied by minimum requirements called thresholds. Once signed by the milestone decision authority, APBs may only be changed at subsequent milestone or program reviews, or with the approval of the milestone decision authority as a response to an unrecoverable baseline deviation.

Acquisition Radar

Radar that searches a spatial volume and identifies potential targets from the background and non-hostile objects.

Acquisition Risk

The chance that some element of an acquisition program produces an unintended result with an adverse effect on system effectiveness, suitability, cost, or availability for deployment.

Acquisition Strategy

A business and technical management approach designed to achieve program objectives within the resource constraints imposed. It is the framework for planning, directing, and managing a program. It provides a master schedule for research, development, test, production, fielding, and other activities essential for program success, and, is the basis for formulating functional plans and strategies (e.g., Test and Evaluation Master Plan, Acquisition Plan, competition, prototyping, etc.).

Acquisition Strategy Report

Describes the acquisition approach to include streamlining, sources, competition, and contract types throughout the period from the beginning of Phase I, Demonstration and Validation, through the end of production.

Acquisition Streamlining

Any effort that results in more efficient and effective use of resources to develop or produce quality systems. This includes ensuring that only necessary and cost-effective requirements are included, at the most appropriate time in the acquisition cycle, in solicitations and resulting contracts for the design, development, and production of new systems, or for modifications to existing systems that involve redesign of systems or subsystems.

Acquisition Logistics

Process of systematically identifying and assessing logistics alternatives, analyzing and resolving logistics deficiencies, and managing integrated logistics support throughout the acquisition process.

Acquisition Management

Management of all or any of the activities within the broad spectrum of "acquisition." Also includes management of the training of the defense acquisition workforce, and management activities in support of PPBS for defense acquisition systems/programs.

Acquisition Plan

A formal written document reflecting the specific actions necessary to execute the approach established in the approved acquisition strategy and guiding contractual implementation. (See Federal Acquisition Regulation Subpart 7.1 and Defense Federal Acquisition Regulation Supplement Subpart 207.1.)

Acquisition Planning

The process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the need in a timely manner and at a reasonable cost. It is performed throughout the life cycle and includes developing an overall acquisition strategy for managing the acquisition and a written acquisition plan.

Acquisition, Tracking and Pointing (ATP)

The process of acquiring within a given field of view a target (or targets) and maintaining a precision track of the same while enabling the pointing of a sensor or weapon at the target so that it may be destroyed.

Acquisition/ Reacquisition Time

The time required to establish or reestablish lock on the received signal. This includes carrier, symbol, frame, code, and crypto synchronization.

ACRF

Advanced Computer Research Facility.

ACRN

Account Code Reporting Number.

ACS

- Attitude Control System.
 AEGIS Combat System.
 Assistant Chief of Staff.
 Airspace Control System.
- 5. Aerial Common Sensor (USA term).

ACSI Assistant Chief of Staff for Intelligence.

ACSIS AEGIS Combat System Interface Simulation.

ACSN Advance Change/Study Notice.

ACTD See Advanced Concept Technology Demonstration.

ACTE Analytical Communications Test Environment ATD.

ACTEX Advanced Controls Technology Experiment.

Active In surveillance, an adjective applied to actions or equipment which emit energy capable

of being detected, e.g., radar is an active sensor.

Active Air Defense Direct defensive actions taken to nullify or reduce the effectiveness of hostile air action.

It includes such measures as the use of aircraft, air defense weapons, weapons not used

primarily in an air defense role and electronic warfare.

Active

Communications Security Threat Threats to an electronic system posed by a capability to disrupt communications or to seize control or deny positive control of electronic systems to intended users, e.g.,

jamming and imitative deception.

Active Defense 1. The employment of limited offensive action and counterattacks to deny a contested

area or position to the enemy. See also Passive Defense. 2. In-flight intercept and destruction of ballistic missiles and negation of their warheads.

Active Defense (TBMD)

Active defense protects against theater missiles by destroying them in flight. Engagement capability is required throughout all phases of the missile's trajectory (boost, post-boost, mid-course, and terminal) to prevent saturation of point defense, to negate warhead effects, and to ensure minimal leakage in defending critical assets. Therefore, active defenses must consist of defense in depth to provide multiple engagement opportunities with differing technologies, increasing the probability of kill, and countering the enemy's counter-measure efforts. Active defenses could consist of space-, air-, ground-, and sea-based systems. If a strategic ballistic missile defense system is deployed, the active TMD should be supported by, but not limited by, those systems to increase the defense in the theater of operations. Active defense is considered one of the four pillars of TMD capability. (JCS J-38 CONOPS)

Active Homing Guidance

Guidance system in which both the source for illuminating the target, and the receiver for detecting the illuminating energy reflected from the target are carried within the

missile. (See Guidance.)

Active Sensor One that illuminates a target, producing return secondary radiation, which is then

detected to track and/or identify the target. An example is radar.

ACTS 1. AEGIS Combat Training System.

2. Advanced Communications Technology Satellite.

ACUS Army Common User System.

ACVC Ada Compiler Validation Capability.

ACW Anti-Carrier Warfare.

ACWP Actual Cost of Work Performed.

AD 1. Air Defense. 2. Active Defense. 3. See Aerospace Defense.

Ad Int Advanced Interceptor (BMDO/POC term).

AD TOC Air Defense Tactical Operations Center.

AD/C³**I** Air Defense/Command, Control, Communications and Intelligence.

ADA Air Defense Artillery (USA term).

Ada Name of a higher order computer programming code.

AdaMAT Ada Automated, static code, analysis tool.

ADAPT Advanced DEW Active Precision Tracker.

Adaptive Defense (Also Adaptive Preferential Defense) Adaptive defense is defense that is responsive to

an actual attack in that it takes advantage of the structure or weakness of the attack to

maximize a priority defense objective.

Adaptive Flexible Defense (AFD) The ability to select and prioritize in near-real time what critical civilian and military assets and functions to defend and to efficiently employ defense in response to the characteristics of the attack while effectively enforcing defense priorities. (JOSDEPS)

Adaptive Optics (ADOPT)

Optical systems which can be modified (e.g., by controlling the shape of a mirror) to compensate for distortions. An example is the use of information from a beam of light passing through the atmosphere to compensate for the distortion suffered by another beam of light on its passage through the atmosphere. Used to eliminate the "twinkling" of stars in observational astronomy and to reduce the dispersive effect of the atmosphere on laser beam weapons.

Adaptive Preferential Defense See Adaptive Defense.

ADATOC Air Defense Artillery Tactical Operations Center (USA brigade).

ADC Analog-to-Digital Converter.

ADCATT Air Defense CATT (USA term).

ADCC Air Defense Control Center.

ADCOM OBSOLETE. (U.S.) Aerospace Defense Command, Peterson AFB, CO.

ADCP 1. Air Defense Communications Platform. 2. Air Defense Command Post.

ADD Air Defense District.

ADDA Air Defense Decision Aid.

ADDS 1. Air Defense Demonstration System.

2. Army Data Distribution System = ELPIRS + JTIDS.

ADI 1. Air Defense Initiative. 2. Attitude Direction Indicator.

ADIZ Air Defense Identification Zone.

ADLT Advanced Discriminating LADAR Technology.

ADM 1. See Acquisition Decision Memorandum 2. Advanced Development Model.

3. Atomic Demolition Munitions.

Administrative Contracting Officer (ACO) The government contracting officer located at a contract administrative office who is assigned the responsibility for administration of Government contracts. (Defense

Systems Management College Glossary)

ADMS Air Defense Missile System (USMC term).

ADOC See Aerospace Defense Operations Center.

ADOCC Air Defense Operations Control Center.

ADOP Advanced Distributed Onboard Processor.

ADOPT See Adaptive Optics.

ADP 1. Automated Data Processing. 2. Arrow Deployability Project.

ADPE Automated Data Processing Equipment.

ADR Advanced Data Recording.

ADRG ARC Digital Raster Graphics.

ADS Advanced Distribution System.

ADSAM Air-Directed Surface-to-Air Missile.

ADSG Air Defense Sub Group.

ADSI Air Force Defense Systems Integrator.

ADT Architecture Development Team (DoD Space Architect term).

ADTOC Air Defense Tactical Operations Center.

ADUSD Assistant Deputy Under Secretary of Defense

Advance Funding Budget authority provided in an appropriation act that allows funds to be committed to a

specific purpose (obligated) and spent during this fiscal year even though the appropriation actually is for the next fiscal year. Advance funding generally is used to avoid requests for supplemental appropriations for entitlement programs late in a fiscal

year when the appropriations for the current fiscal year are too low.

Advance Authority provided in an appropriations act to obligate and disburse from the succeeding **Procurement** year's appropriation. The funds are added to the budget authority for the fiscal year and

deducted from the budget authority of the succeeding fiscal year. Used in major acquisition programs for advance procurement of components whose long-lead time require purchasing early in order to reduce the overall procurement lead time. Advance procurement of long lead components is an exception to the DoD "full funding" policy.

Advanced Concept Technology Demonstration (ACTD) An integrating effort to assemble and demonstrate a significant new military capability, based upon maturing advanced technology(s) in a real-time operation at a scale size adequate to clearly establish operational utility and system integrity.

Advanced Launch System (ALS) OBSOLETE. This proposed system was to be a heavy launch vehicle and appropriate ground support facilities which may have supported SDIO, USAF, Navy and NASA space launch missions into the next century.

Advanced Technology Demonstration The actual demonstration of an advanced state-of-the-art system under conditions likely to exist when in operation.

ADWC Air Defense Warfare Center.

ADX Air Defense Exercise.

AE 1. Acquisition Executive. 2. Antenna Equipment.

AEC Atomic Energy Commission (US).

AEDC Arnold Engineering Development Center, Arnold AFB, TN.

AEG General Electric Corporation of Germany.

AEGIS The Navy's advanced, fast reaction, high firepower, shipboard anti-air warfare area

defense system (Greek word for "shield").

AEGIS C&D AEGIS Command and Decision.

AEGIS CRC AEGIS Control and Reporting Center.

Aerospace Defense

(AD)

1. All defensive measures designed to destroy attacking enemy aircraft, missiles, and space vehicles after they leave the Earth's surface, or to nullify or reduce the effectiveness of such attacks. 2. An inclusive term encompassing air defense and space

defense.

Aerospace Defense Operations Center (ADOC) Existing center in Cheyenne Mountain AFB (CMAFB) which controls the Air Defense of North America mission.

Aerostats Ship- or ground-moored balloon supporting a radar antenna.

Aerothermal Kill A kill in which the thermal shielding of the target RV is damaged by the defensive

system. The RV is subsequently destroyed during reentry.

AES Army [Tactical Command and Control System] Experimentation Site

AEW Airborne Early Warning.

AEWR Airborne Early Warning Radar.

AF 1. Air Force. 2. Award Fee.

AF SATCOM Air Force Satellite Communications [System].

AF/IN Air Force Intelligence.

AF/SC Deputy Chief of Staff for Command, Control, Communications, and Computers, United

States Air Force.

AF/TAA Air Force Executive Agent for Theater Air Defense.

AFAC Air Force Advisory Committee.

AFAE Air Force Acquisition Executive.

AFAM Air Force Acquisition Model.

AFAS Advanced Field Artillery System.

AFATDS 1. Advanced Field Artillery Tactical Data System.

2. Army Field Artillery Target Direction System.

AFC²**S** Air Force Command and Control System.

AFCC See Air Force Component Commander.

AFCCC Air Force Component Command Center.

AFCENT Allied Forces Central Europe (NATO).

AFCS Automatic Flight Control System.

AFCSC Air Force Cryptological Support Center.

AFD See Adaptive Flexible Defense.

AFDSOC Air Force Defense System Operations Center.

AFF Arming, Fusing and Firing.

AFFTC Air Force Flight Test Center, Edwards AFB, CA.

AFGWC See Air Force Ground/Global Weather Center.

AFID Anti-Fratricide Identification Device.

AFIWC Air Force Information Warfare Center.

AFM Award Fee Monitor.

AFMC Air Force Materiel Command, Wright-Patterson AFB, Ohio.

AFNORTH Allied Forces Northern Europe (NATO).

AFOSH Air Force Occupational Safety and Health.

AFOTEC Air Force Operational Test and Evaluation Center, Kirkland AFB, NM.

AFPEO/SP Air Force Program Executive Officer for Space.

AFRB Award Fee Review Board.

AFSARC Air Force System Acquisition Review Council.

AFSATCOM See Air Force Satellite Communications System.

AFSB Air Force Science Board.

AFSC 1. Air Force Space Command (see also AFSPACECOM).

AFSCN See Air Force Satellite Control Network.

AFSD OBSOLETE. Air Force Space Division. (Replaced by USAF/SMC.)

AFSMC Air Force Space and Missile Systems Center.

AFSOUTH Allied Forces, Southern Region (NATO).

AFSPACECOM Air Force Space Command, Paterson AFB, CO.

AFSPC Air Force Space Command, Paterson AFB, CO.

AFSPOC See Air Force Space Operations Center.

AFSSI Air Force System Security Instruction.

AFSTC 1. Air Force Space Test Center, Sunnyvale, CA.

2. Air Force Space Technology Center, Kirtland AFB, NM.

AFSWC Air Force Space Warfare Center.

AFTAC Air Force Technical Applications Center, Patrick AFB, FL.

AFTADS Army Field Artillery Target Data System.

AFWAN Air Force WWMCCS ADP Modernization.

AFWL Air Force Weapons Laboratory (Phillips Lab).

AGARD 1. Advisory Group on Aerospace Research and Development.

2. Aerospace Research and Development (NATO organization).

AGC Automatic Gain Control.

AGCCS 1. Air Force Global Command and Control System (USAF term).

2. Army Global Command and Control System (USA term).

AGM-65 Maverick Air-to-Surface Missile.

AGMC Air Force Aerospace Guidance and Metrology Center (Newark AFB, OH).

AGRE Active Geophysical Rocket Experiment.

AGT Above Ground Test.

AHIS Agile Homing Interceptor Simulator.

AHSG Ad Hoc Study Group.

AHWG Ad Hoc Working Group.

ΑI 1. See Artificial Intelligence. 2. Action Item. 3. Air Interdiction.

AIA Air Intelligence Agency.

AIAA American Institute of Aeronautics and Astronautics

AIC 1. Atlantic Intelligence Command. 2. Account Identifier Code.

AID Agile Interceptor Development.

AIDA Artificial Intelligence Discrimination Architecture (UKMOD).

AIDPN Architecture Investment and Deployment Planning Notebook.

AIM Air Intercept Missile.

Aimpoint The specific point at which a weapon is aimed. The point may be on the earth's surface,

in the atmosphere, or in space. In some cases, the specific lethal point on a target to

which a weapon is aimed.

AIP Advanced Interceptor Program (formerly Brilliant Pebbles).

Air Defense All measures designed to nullify or reduce the effectiveness of hostile air action. See

also active air defense, passive air defense.

Air Defense Action

Area

An area and the airspace above it within which friendly aircraft or surface-to-air weapons are normally given precedence in operations except under specific conditions. See also air defense operations area.

Air Defense Artillery

Weapons and equipment for actively combating air targets from the ground.

Air Defense

Identification Zone

Airspace of defined dimensions within which the ready identification, location, and control of airborne vehicles are required. Commonly referred to as ADIZ. See also air defense operations area.

Air Defense **Operations Area** A geographic area defining the boundaries within which procedures are established to minimize interference between air defense and other operations. designation of one or more of the following: A. Air defense action area; B. Air defense area; C. Air defense identification; D. Fire power umbrella.

Air Force Ground/Global Weather Center (AFGWC)

AFGWC provides Air Force and Army with global information and products relating to past, present, and future states of the aerospace environment. Weather data is provided to the Weather Support Unit (WSU) for use by the SDS. Also provides space environmental data such as sunspots, electromagnetic storms, etc. Located at Offutt AFB, NE.

Air Force Satellite Communications System (AFSATCOM)

A collection of transponders on host satellites used by U.S. Strategic Command to pass emergency action messages (EAM) and damage assessment reports. AFSATCOM is also used to pass sensor data between sites and CMAFB.

Air Force Satellite Control Network (AFSCN) A global, multi-command configuration of space vehicle command, control, and communications resources operating in concert to support DoD and other assigned space missions.

Air Force Component Command Center (AFCCC) A segment of the Command and Control Element which replicates capabilities of the CCC (BMD) segment and provides administrative and logistics support to Air Force Component Forces with the Strategic Defense System. The AFCCC was eliminated from the CCE (now C^2E) architecture during the last SAS system architecture definition update.

Air Force CRC

Air Force Control and Reporting Center.

Air Force Operational Test and Evaluation Center (AFOTEC) Responsible for the operational test and evaluation of systems being developed for use by the Air Force (Located at Kirtland AFB, NM).

Air Force Space Command (AFSPC) A major Air Force command and the Air Force component of United States Space Command responsible for the training, equipping, manning, administering, and funding of assigned systems. Located in Colorado Springs, CO.

Air Force Space Operations Center (AFSPOC) An AFSPACECOM center located in Colorado Springs, CO.

Air Surveillance

The systematic observation of airspace by electronic, visual, or other means, primarily for the purpose of identifying and determining the movements of aircraft and missiles, friendly and enemy, in the air space under observation.

Air-breathing

A flying vehicle that uses the oxygen in the atmosphere as the oxidizer in its propulsion system. Examples are jet aircraft and cruise missiles. This category does not include ballistic missiles.

Airborne Surveillance Testbed (AST) A Boeing 767 aircraft with a large infrared sensor designed to address optical sensor issues.

AIRMS

Airborne Infrared Measurement System.

AIRREQSUP

Air Request Support (JFACC term).

AIRS

Atmospheric Infrared Sounder.

Airspace Control in the Combat Zone

A process used to increase combat effectiveness by promoting safe, efficient, and flexible use of airspace. Airspace control is provided in order to prevent fratricide, enhance air defense operations, and permit greater flexibility of operations. Airspace control does not infringe on the authority vested in commanders to approve, disapprove, or deny combat operations.

Airspace Control Plan

The document approved by the joint force commander that provides specific planning guidance and procedures for the airspace control system for the joint force area of responsibility.

AIRSUPREQ

Air Support Request (JFACC term).

AIS 1. See Automated Information System. 2. Architecture Integration Study. 3. Airborne

Intercept System.

AIST Advanced Interceptor and Systems Technology.

AIT 1. Advanced Interceptor Technologies.

2. Atmospheric Interceptor Technology program. The objective of the AIT program is the development and demonstration of light-weight kinetic kill vehicle technologies for hypervelocity atmospheric intercepts. Four primary areas of concentration for AIT are the forebody/cooled window, light-weight strap-down seeker, solid divert and attitude control system (DACS), and the integration of these components. 3. Arrow Intercept

Test.

AJ Antijam.

AJPO Ada Joint Program Office.

AJTBP Augmented Joint Theater Battle Picture.

AL 1. Acquisition Logistician.

ALARM Alert, Locate, and Report Missiles.

ALAS Advanced Liquid Axial Stage.

ALBCS Airborne Laser Beam Control System.

ALC Air Logistics Center (AF).

ALCC Airlift Coordination Center (JFACC term).

ALCE Airlift Coordination Element (JFACC term).

ALCM See Air Launched Cruise Missile.

ALCOR ARPA/Lincoln C-band observable radar. (USAKA KREMS)

ALDT Average Logistics Delay Time.

ALE Airborne Laser Experiment.

ALERT See Attack and Launch Early Reporting to Theater.

ALG Algorithm.

ALI 1. Alpha/LAMP Integration. 2. AEGIS Leap Intercept.

ALIRT Advanced Large-area Infrared Transducer

ALL Airborne Laser Laboratory.

Allocated Availability Requirement The systems engineering allocated requirement probability that a weapons system's

element is available to perform its function.

Allocation

1. An authorization by a designated official of a DoD component making funds available within a prescribed amount to an operating agency for the purpose of making allotments (i.e., the first subdivision of an apportionment). 2. In Air Defense planning, the translation of apportioned operations/tasks in total numbers of sorties by aircraft type available for each operation/task.

Allotment

The temporary change of assignment of tactical air forces between subordinate commands. The authority to allot is vested in the commander having operational command.

ALO

Alpha Laser Optimization.

ALOD

Adaptive Locally Optimum Detector (Navy term).

Alpha Particle

A particle emitted spontaneously from the nuclei of some radioactive elements. It is identical to a helium nucleus, having a mass of four units and a charge of positive two. (See Radioactivity.)

ALPS

Accidental Launch Protection System.

ALS

See Advanced Launch System.

ALSP

Aggregate Level Simulation Protocol.

ALT

1. Airborne Laser Technology. 2. Arrow Lethality Test.

ALTAIR

UHF test radar at USAKA.

AltAir

Project name for the feasibility demonstration of a short range, air drop, ballistic missile target, dropped from a C-130 cargo aircraft.

Alternate National

Military

Command Center (ANMCC)

er

An element of the National Military Command System (NMCS) which serves as an alternate to the NMCC, Pentagon, Washington, DC. Located at Ft. Ritchie, MD.

Alternate

Processing and Correlation Center

(APCC)

NORAD capability in USSTRATCOM Command Post that receives, processes, and analyzes TW/AA information.

Alternate Space Defense Operations Center (ASPADOC) The backup to the SPADOC, maintained by the Naval Space Command, at Dahlgren, VA, collocated with the NAVSPOC and NAVSPASUR.

ALU Arithmetic Logic Unit.

AM Amplitude Modulation.

AMC 1. Air Mobility Command, Scott AFB, IL. 2. See Army Materiel Command.

3. Midpoint Compromise Search Area. 4. Acquisition Method Code.

5. Advisory Management Committee.

AMCOM Army Aviation and Missile Command (Oct. 1996).

AMD Air and Missile Defense.

AMDF Army Master Data File (USA term).

AMDS Active Missile Defense System.

AMDTF Air and Missile Defense Task Force(USA term).

AMEMB American Embassy.

AMFB Acquisition Management Functional Board.

AMG Antenna mast group.

AMOR Army Missile Optical Range, Redstone Arsenal, AL.

AMOS Air Force Maui Optical Station.

amp ampere.

AMP Ansular Measurement Precision.

AMRAAM Advanced Medium Range Air-to-Air Missile.

AMS Aerodynamic Maneuvering System.

AMSAA Army Materiel Systems Analysis Agency.

AMSDL Acquisition Management System Data Requirements Control List.

AMT ATCS Mobile Terminal.

AMTB Attack Management Test Bed

AMTL Army Materials Technology Laboratory.

A/N Army/Navy.

AN/TPS-59 USMC Firefinder radar.

ANALYZE Static Code Analyzer.

ANIK E1 Canadian telecommunications satellite's name.

ANL Argonne National Laboratory.

ANMCC See Alternate National Military Command Center.

ANMD Army National Missile Defense.

ANN Artificial Neural Networks.

ANSI American National Standards Institute.

Antenna Area The ratio of the power available at the terminals of an antenna to the incident power

density of a plane wave from the direction polarized.

Anti-Ballistic Missile (ABM) The term used for Ballistic Missile Defense (BMD) weapons developed to negate the ballistic missile threat in the late 60s and early 70s.

Anti-Ballistic

A system designed to counter strategic ballistic missiles or their elements in flight.

Missile System Anti-Radiation Missile (ARM)

A missile that homes passively on a radiation source.

Anti-Simulation

The process of introducing random variations to the signature characteristics of an object in order to cause misidentification of the object by the sensors. The disguising of an RV to resemble a non-threatening object such as a piece of debris, a balloon, or a

decoy.

Antiair Warfare

Action required to destroy or reduce to an acceptable level the enemy air and missile threat. It includes such measures as the use of interceptors, bombers, antiaircraft guns, surface-to-air and air-to-air missiles, electronic countermeasures, and destruction of the air or missile threat both before and after it is launched. Other measures taken to minimize the effects of hostile air action are cover, concealment, dispersion, deception, and mobility (Navy/USMC).

Antisatellite Weapon (ASAT)

A weapon designed to destroy satellites in space. The weapon may be launched from the ground, from an aircraft, or be based in space. The target may be destroyed by either a nuclear or conventional explosion, by collision at high speed, or by a directed energy beam.

Ao Operational Availability.

AO 1. See Associated Object. 2. Action Officer. 3. Area of Operations.

4. Acousto-Optical. 5. Attack Operations.

AOA Analysis of Alternatives (Acquisition term). An analysis of the estimated costs and

> operational effectiveness of alternative materiel systems to meet a mission need and the associated program for acquiring each alternative. Formerly known as Cost and

Operational Effectiveness Analysis (COEA).

AOC Air Operations Center.

AOCC Air Operations Control Center.

AOEC Aero-Optic Evaluation Center, Buffalo, NY.

AOI Active Optical Imager.

AOP Airborne Optics Platform.

AOR Area of Responsibility.

AOS OBSOLETE. Airborne Optical Sensor.

AOSP Advanced On-Board Signal Processor.

AOTF Acousto-Optic Tunable Filter.

AP Acquisition Plan.

APB See Acquisition Program Baseline and Production Baseline. **APBI** Advanced Planning Briefing to Industry (BMDO).

APCC See Alternate Processing and Correlation Center.

APDP Acquisition Professional Development Program.

APEX 1. Advanced Phase Conjunction Experiment.

2. Advanced Photovoltaic and Electronics Experiment (USAF term).

API 1. Ascent-Phase Intercept. 2. Application Program Interface.

APIPT Acquisition Planning IPT (PAC-3 term).

APL 1. Applied Physics Laboratory, Johns Hopkins University, Baltimore, MD.

2. Allowance Parts List (USN term).

APLE Average Power Laser Experiment.

APM 1. Advanced Penetration Model. 2. Assistant Program Manager.

APMA Acquisition Program Management Agreement.

APO 1. Apache Point Observatory. 2. Arrow Project Office.

APOD Aerial Point of Debarkation.

Application

1. (Software) It refers to a process, usually implemented as a software routine, at the highest level (Level 7) of the ISO open system architecture. 2. (SDS) It refers to such processes as the Battle Management, Navigation, Network Control, and other high level functions which may originate or receive messages over the SDS Communication network, via underlying lower-level protocols. 3. Software designed to fulfill specific needs of a user. 4. (Acquisition) The process of selecting requirements that are pertinent and cost effective for the particular materiel acquisition and contractually invoking them at the most advantageous times in the acquisition cycle.

Apportionment

1. A determination made by the Office of Management and Budget which limits the amount of obligations or expenditures that may be incurred during a specified time period. An apportionment may limit all obligations to be incurred during the specified period or it may limit obligation to be incurred for a specific activity, function, project, object, or a combination thereof. The third of four phases of the DoD resource allocation process. 2. The determination and assignment of the total expected effort by percentage and/or by priority that should be devoted to the various air operations and/or geographic areas for a given period of time. 3. In the general sense, distribution for planning of limited resources among competing requirements. Specific apportionments (e.g. air sorties and forces for planning) are described as apportionment of air sorties and forces for planning, etc.

Appropriation(s)

An authorization by an act of Congress that permits Federal agencies to incur obligations and make payments from the Treasury. An appropriation usually follows an enactment of authorizing legislation. An appropriation act is the most common means of providing budget authority. Appropriations do not represent cash actually set aside in the Treasury; they represent limitations of amounts which agencies may obligate during a specified time period. See Authorization.

Approved Program

The technical and operational, schedule, and quantity requirements reflected in the latest approved USD(A) ADM, or other document reflecting a more current decision of the USD(A) or other approval authority, such as the President's Budget, the FYDP, and supporting documentation.

APPS

Automated POM Preparation Instruction.

APS

1. Axial Propulsion System. 2. Automatic Phasing System.

3. Afloat Planning System (Navy term).

APT

Acquisition, Pointing, and Tracking.

APU

Auxiliary Power Unit.

AR

Army.

ARB

Accreditation Review Board.

ARC

1. Advanced Research Center, USA Huntsville, AL.

2. Atlantic Research Corporation.

ARC/SC

Advanced Research Center / Simulation Center.

ARCCC

See Army Component Command Center.

Architectural

Design

The process of defining a collection of hardware and software components and their interfaces to establish the framework for the development of a computer system.

Architecture Integration Study (AIS) A study to determine the performance of alternative architectures and element designs that satisfy BMD System mission requirements, and to evaluate the effect of changing threats and advances in technology on the systems, subsystems, and components making up existing and proposed architectures.

ARCT

Advanced Radar Component Technology.

ARDSOC

Army Defense System Operations Center.

ARE

Aerothermal Reentry Experiment.

Area Air Defense Commander (AADC) The person given overall responsibility for air defense within an overseas unified command, subordinate unified command, or a joint task force. Normally, this will be the Air Force component commander.

Area Defense

Defense of a broad geographical area that contains both military and civilian assets (i.e., depots, towns/cities). (USSPACECOM)

Area of Influence

A geographical area wherein a commander is directly capable of influencing operations by maneuver or fire support systems normally under his command or control.

Area of Interest

(AOI)

The area of influence and surrounding areas that are of concern to the commander for the objective of current and planned operations. This may include areas occupied by enemy forces.

Area of Operations

That portion of an area of war necessary for military operations and for the administration of such operations.

administration of such of

ARFOR

Army Forces.

Argus An airborne optical platform operated by the Air Force's Phillips Laboratory. Argus is

sometimes used by BMDO to collect flight test signatures, phenomenology, and

intercept data.

ARGUS Advanced Real-time Gaming Universal Simulation.

ARH Anti-Radiation Homing.

ARI Army Research Institute.

ARIES Active Radio Interferometer for Explosion Surveillance.

ARL Airborne Reconnaissance-Low (USA term) [circa 1996 = Reconnaissance equipment in

Dash-7 airplane].

ARM See Anti-Radiation Missile.

Arms Export Control Board (AECB) An interagency board, chaired by the Under Secretary of State for Security Assistance, Science, and Technology, that serves to advise the Secretary of State on matters relating to security assistance program levels and arms transfer policies.

Army Brigade Center (ARBC)

The Army center between the ARSPOC and the ARROC with C2 responsibilities for

BMD.

Army Component Command Center (ARCCC) A segment of the Command and Control Element which replicates capabilities of the CCC (BMD) segment and provides administrative and logistics support to Army Component Forces with the Strategic Defense System. The ARCCC was eliminated from the CCE (now C^2E) architecture during the last SAS system architecture definition update.

u_]

Army Materiel Command (AMC) Performs the assigned materiel functions of the Department of the Army, including research and development; product improvement; human factors engineering; test and evaluation; procurement and production; new equipment training; scientific and technical intelligence production; international logistics programs; and storage, distribution, maintenance, demilitarization, and disposal for the continental United States wholesale supply and maintenance systems as well as for overseas systems. Located in Alexandria, VA.

Army Space Operations Center (ARSPOC) The Army Space Command Center responsible for logistically/ administratively controlling assigned SDS elements and which shall also include the capability to assure the BMD mission should the USCINCSPACE CCC be lost.

ARNG Army National Guard.

AROS Airborne Radar Optical System.

ARP Address Resolution Protocol.

ARPA OBSOLETE. Advanced Research Projects Agency. (Now known as Defense Advanced

Research Projects Agency (DARPA)).

ARPANET OBSOLETE. ARPA Network. (Now known as DARPA Network.)

ARRC Allied Command Europe Rapid Reaction Corps.

ARROC Army Regional Operations Center.

Arrow A technology demonstration program started in 1988 and designed to meet Israeli

architecture requirements for area defense of population centers against TBMs.

ARS 1. Airborne Remote Sensing. 2. Action Request System.

ARSCS Automated Rear Services Control System.

ARSPACE [United States] Army Space Command, Colorado Springs, CO.

ARSPACECOM [United States] Army Space Command.

ARSPOC See Army Space Operations Center.

ARU 1. Alignment Reference Unit (PAC-3). 2. Attitude Reference Unit.

ASA 1. Assistant Secretary of the Army. 2. Airborne Shared Aperture [program].

ASAF Assistant Secretary of the Air Force.

ASAF (A) Assistant Secretary of the Air Force (Acquisition).

ASARC Army Systems Acquisition Review Council.

ASARS Advanced Synthetic Aperture Radar System.

ASAS 1. All Source Analysis System. 2. Advanced Solid Axial Stage.

ASAT See Antisatellite Weapon.

ASB Army Science Board.

ASBM Air-to-Surface Ballistic Missile.

ASC 1. Army Space Command (See also USARSPACECOM, ARSPACECOM).

2. Aeronautical Systems Center, Wright Patterson AFB, OH.

ASCC 1. Air Standardization Coordination Committee.

2. Alternate Space Control Center (USSC term).

ASCII American Standard Code for Information Interchange.

ASCM Advanced Spaceborne Computer Module.

ASCO Advanced Systems Concept Office.

ASCON Associate Contractor.

ASD 1. OBSOLETE. Aeronautical Systems Division (AF). See Aeronautical Systems Center

(ASC)

2. Assistant Secretary of Defense.

ASDC Alternate Space Defense Center.

ASDP Advanced Sensor Demonstration Program.

ASEAN Association of Southeast Asian Nations.

ASEDP Army Space Exploitation Demonstration Program.

ASIC Application Specific Integrated Circuit.

ASIOE Associated Support Items of Equipment (USA term).

ASL Authorized Stockage List (USA term).

ASM 1. See Anti-Simulation. 2. Antiship Missile. 3. Air-to-Surface Missile.

ASMD Antiship Missile Defense.

ASMDC Army Space and Missile Defense Command, Huntsville, AL (1998).

ASMP French Air Surface Missile.

ASN Assistant Secretary of the Navy.

ASN(RD&A) Assistant Secretary of the Navy (Research, Development & Acquisition).

ASN(SB&L) Assistant Secretary of the Navy (Shipbuilding and Logistics).

ASOC Air Support Operations Center.

ASP 1. Airborne Surveillance Platform. 2. Advanced Sensor Program.

3. Advanced Sensor Platform. 4. Annual Service Practice.

ASPADOC The backup to the SPADOC, maintained by the Naval Space Command, at Dahlgren,

VA, collocated with the NAVSPOC and NAVSPASUR.

ASPIRIS Advanced Signal Processing for IR Sensors.

ASPJ Airborne Self Protection Jammer.

ASPO Army Space Program Office.

ASR Acquisition Strategy Report.

ASROC Antisubmarine Rocket.

ASSERT Augmentation Awards for Science and Engineering Research Training (DoD term).

Assessment 1. Appraisal of the worth of an intelligence activity, source information, or product in

terms of its contribution to a specific goal, or the credibility, reliability, pertinence, accuracy, or usefulness of information in terms of an intelligence need. When used in context with evaluation, assessment implies a weighing against resource allocation, expenditure or risk. 2. An independent evaluation of a model or simulation by a

BMDO-sponsored Confidence Assessment Team for a specified purpose.

ASSIST Automated Systems Security Incident Support Term (DISA term).

Associated Object that remains near a deployed reentry vehicle, decoy or chaff puff. **Object**

Assume Course Make course attitude adjustments to the weapon platform orientation prior to engagement.

Assured Defense Strategies and tactics that result in (specified) a high probability of kill against

designated targets, regardless of the interceptors required. (USSPACECOM)

Assured Kill This option requires defense segments to employ tactics which produce the highest

probability of kill consistent with the available number of defensive resources

(interceptors).

AST 1. See Airborne Surveillance Testbed. 2. Advanced Sensor Technology.

ASTMP Army Science and Technology Master Plan.

ASTP Advanced Sensor Technology Program.

ASWG Architecture Systems Working Group.

AT Advanced Technology.

ATA 1. Advanced Test Accelerator. 2. Avionics Test Article.

ATACC 1. Advanced Tactical Command Central (USMC term).

2. Advanced Theater Air Command Center.

ATACM Army Tactical Missile.

ATACMS Army Tactical Missile System.

ATAF Allied Tactical Air Force (NATO).

ATB 1. Allied Test Bed. 2. Analytical Tool Box.

ATBM 1. Anti-Tactical Ballistic Missile. 2. Anti-Theater Ballistic Missile.

ATC Automated Technical Catalog.

ATCCS Army Tactical Command and Control System.

ATCOM Army Aviation and Troop Command (pre-Oct 96) (See AMCOM).

ATD 1. See Advanced Technology Demonstration. 2. Algorithm Test Driver.

3. Advanced Technology Directorate.

ATDL Army Tactical Data Link.

ATDM Adaptive Time Division Multiplexer.

ATDS Airborne Tactical Data System.

ATE Automatic Test Equipment.

ATH Above The Horizon.

ATHS Airborne Target Handover System.

ATI Advanced Technology Interceptor.

ATIM Advanced Technology Insertion Module.

ATIS Alliance for Telecommunications Industry Solutions.

ATM 1. Anti-Tactical Missile.

2. Asynchronous Transfer Mode (TelComm/Computer term).

ATMD Army Theater Missile Defense.

ATMDF Air and Theater Missile Defense Force (USA term).

ATMDPO Army Theater Missile Defense Program Office.

ATO Air Tasking Order.

ATOC Air Tactical Operations Center/Commander.

ATODB Air Tasking Order DataBase.

ATP 1. See Acquisition, Tracking, and Pointing. 2. Authority To Proceed.

3. Allied Tactical Publication. 4. Acceptance Test Procedures.

5. Acceptance Test Program. 6. Advanced Technology Program (Department of

Commerce term). 7. Authority to Process.

ATP&FC Acquisition, Tracking, Pointing, and Fire Control.

ATR Autonomous/Automated Target Recognition.

ATRJ Advanced Threat Radar Jammer.

ATSIM Acquisition and Track Simulation.

Attack An evaluation of information to determine the potential or actual nature and objectives

Assessment (AA) of an attack for the purpose of providing information for timely decisions.

Attack Characterization

The process by which the parameters of an attack in progress are developed, updated

and defined.

Attack and Launch Early Reporting to Theater (ALERT) An upgrade to ground station mission processing which exploits inherent satellite

capability to provide theater missile warning and cueing.

Attack Operations (Counterforce)

1. Attack operations prevent launch of theater missiles by attacking all elements of the overall enemy system, including such actions as destroying launch platforms, support facilities, reconnaissance, intelligence, surveillance and target acquisition platforms, command and control nodes, and missile stocks. Attack operations can be executed by space, air, ground, maritime, and special operations forces. Attack operations are

considered one of the four pillars of TMD capability. (JCS J-38 CONOPS)

Attack Price A concept used to evaluate the performance of a BMD system that defines "price" as the number of RVs required to ensure target destruction. Target destruction is defined

as a probability of target survivability using the drawdown curve.

Attack Warning/ Attack Assessment (AW/AA)

Integrated air, missile, and space defense data used to determine whether an attack is

underway and, if so, what is the type and strength of the attack.

ATTD Advanced Technology Transition Demonstration.

Attenuation Decrease in intensity of a signal, beam, or wave as a result of absorption and scattering

out of the path of a detector by the propagating medium, but not including a decrease in

intensity due to geometric spreading (e.g., the inverse square of distance).

ATV Advanced Technology Validation.

AULS Accidental or Unauthorized Limited Strike.

AUPC See Average Unit Procurement Cost.

AURORA Canadian AASW (?) aircraft.

Autonomous Acquisition Range (Max.) The maximum range at which a target can be acquired by a sensor operating in a non-

cued mode.

AV 1. Air Vehicle. 2. Audio-Visual.

AVATAR (SAIC) Flight dynamics simulator.

AVC Advanced Vehicle Concept.

AVCATT Aviation CATT (USA term).

Average Unit Procurement Cost (AUPC) Design to average unit procurement cost objectives, expressed in constant dollars, are established for Milestone I, Concept Demonstration Approval. AUPC includes recurring flyaway, rollaway, sailaway costs (including nonrecurring production costs) adjusted for

data, training, support equipment, and initial spares costs.

AVHRR Advanced Very High Resolution Radiometer.

AVSCOM Aviation Systems Command (US Army).

AW/AA See Attack Warning/Attack Assessment.

AWACS Airborne Warning and Control System.

AWC Air Warfare Centre (UK RAF term).

AWE Advanced Warfighting Experiment.

AWG 1. Acquisition Working Group (GSA term). 2. Algorithm Working Group.

AWS 1. AEGIS Weapons System. 2. Advanced Warning System.

3. Arrow Weapons System (Joint US/ Israeli BMD weapons system).

Azimuth Orientation of a vector projected onto a reference horizontal plane, relative to a

reference direction in the plane.

Azimuth Angle A positive angle measured clockwise in a reference horizontal plane from a reference

direction to a given direction. For a topocentric-horizon coordinate reference frame, the reference direction is due north (true north or magnetic north, depending on the

application).

B Billion.

B Spec Development specification.

B2C2 Brigade-and-Below Command and Control System (Army term).

BA Budget activity. The budget activity codes are:

01 -- Basic Research

02 -- Exploratory Development

03 -- Advance Technology Development

04 -- Dem/Val 05 -- EMD

06 -- Management Support

07 -- Operational Systems Development

BAA Broad Agency Announcement.

BAC Budget At Completion.

Backbone Consists of the space

Consists of the space communications network, the ground communications network, and the interconnection between the two.

Background Rejection (Surveillance)

Network

The suppression of background noise for the improvement of an object signal.

BAE Battlefield Area Evaluation (USA term).

BAFO Best and Final Offer.

BAI Battlefield Air Interdiction.

Balanced Technology Initiative (BTI) DoD's program to hasten application of advanced technology to the most critical and urgent operational needs. BTI projects are demonstrating leap-ahead capabilities enabled by emerging technologies in smart weapons, target acquisition, battlefield ${\rm C}^3{\rm I}$, active countermeasures, and ultrawide bandwidth radars and high power microwave systems.

Ballistic Coefficient The weight of the object divided by the product of the coefficient of drag and the projected area (W/CDA), in kilograms per square meter.

Ballistic Trajectory The trajectory traced after the propulsive force is terminated and the body is acted upon only by gravity and aerodynamic drag.

Ballistic Missile Defense (BMD) All active and passive measures designed to detect, identify, track, and defeat attacking ballistic missiles (and entities), in both strategic and theater tactical roles, during any portion of their flight trajectory (boost, post-boost, midcourse, or terminal) or to nullify or reduce the effectiveness of such attack.

Ballistic Missile Defense Operations Center (BMDOC) OBSOLETE. Initially located at the NTF, and ultimately in the Cheyenne Mountain Complex, this facility supports the BMD Cell-USSPACECOM information interface. The BMDOC hosts a BM/C³ processing suite and the operations personnel necessary to coordinate and integrate system-wide BMD activities and supports the USCINCSPACE planning and decision process.

Ballistic Missile Defense Organization (BMDO)

An agency of the Department of Defense whose mission is to manage and direct the conduct of a research program examining the feasibility of eliminating the threat posed by ballistic missiles of all ranges and of increasing the contribution of defensive systems to United States and Allied security. BMDO is the successor to Strategic Defense Initiative Organization (SDIO). Chartered through DoD Directive 5134.9, June 14, 1994.

Ballistic Missile Defense Program An architecture comprising three objectives: Theater Missile Defense (TMD), National Missile Defense (NMD), and Follow-on Research Programs.

Ballistic Missile (BM)

Any missile that does not rely upon aerodynamic surfaces to produce lift and consequently follows a ballistic trajectory when thrust is terminated.

Ballistic Missile Boost Intercept (BAMBI) **Ballistic Missile** Defense (BMD) Cell

OBSOLETE. A late 1966 system concept that a Lockheed study group developed in anticipation of possible government interest in the development of an ABM capability.

This facility will be located in the USSPACECOM Consolidated Command Center

(CCC) and Space Control Center (SPACC) to support the Space Force Application mission area interface between the BMD system and USCINCSPACE. The BMD Cell

Ballistic Missile Defense (BMD) **System**

The aggregate BMD BMC³ and BMD forces that, in total, provide defense against ballistic missile attacks to North America and other areas of vital interest. (USSPACECOM)

will provide command and decision support to USCINCSPACE.

Ballistic Missile Defense Battery An Army operations center which operates and maintains BMD ground-based weapons and sensors.

Ballistic Missile Defense **Organization Cost** Position (BCP)

The official position of BMDO reflecting a rigorous cost estimate reconciliation between the service program office estimate and the BMDO independent cost estimate. The BCP indicates the BMDO resource commitment.

Ballistic Missile Defense Organization **Independent Cost** Assessment (BMDOICA)

The result of the BMDO cost estimating procedure which identifies the cost of a program described in a CARD or CARD-like document. Cost are estimated at the 50th percentile confidence level.

Ballistic Missile Early Warning System (BMEWS) Provides tactical warning of ballistic missile attacks, and is part of Spacetrack system. A two-faced phased array radar located at Thule AB, Greenland; three detection radars and one tracking radar at Clear AFS, AK; and three tracking radars at RAF Fylingdales, UK.

Ballistics

The science or art that deals with the motion, behavior, appearance, or modification of missiles or other vehicles acted upon by propellants, wind, gravity, temperature, or any other modifying substance, condition, or force.

Balloon

A spherical inflatable decoy used as a penetration aid to mask the location of reentry vehicles.

BAMBI

OBSOLETE. See Ballistic Missile Boost Intercept.

Bandwidth

The range of usable frequencies assigned to a channel or system; the difference expressed in Hertz between the highest and lowest frequencies of a band.

BAR Bimonthly Activity Report. **BARBB** BMDO Acquisition Reporting Bulletin Board.

Barrage Jamming Simultaneous electronic jamming over a broad band of frequencies.

Base Program The base program is the program described in the Future Years Defense Program base

file, when updated to conform to the budget presented to Congress in January. It

constitutes the base from which all current-year program changes are considered.

Base Year A reference period which determines a fixed price level for comparison in economic

escalation calculations and cost estimates. The price level index for the base year is

1.000.

Baseline Defined quantity or quality used as starting point for subsequent efforts and progress

measurement. Can be a technical baseline or cost baseline.

Baseline The natural and human environmental conditions which are present prior to **Conditions** implementation of a program and against which impacts are assessed.

Baseline A current operational system, or a composite of current operational subsystems, which Comparison most closely represents the design, operational, and support characteristics of the new System (BCS) system under development.

Baseline Cost A detailed estimate of acquisition and ownership costs normally required for high level Estimate (BCE) decisions. This estimate is performed early in the program and serves as the basepoint

for all subsequent tracking and auditing purposes.

Battery Tactical and administrative artillery unit or subunit corresponding to a company or a

similar unit in other branches of the Army.

Battle Battle management is comprised of two parts: (1) strategies and (2) the collection of tasks to be performed to successfully implement chosen strategies. Given a set of strategies, resources, and hostile asset deployment, battle management addresses the problem of choosing a specific strategy or set of strategies and performing the associated

tasks which would result in the most desired outcome.

Battle BM/C⁴ is a set of automated processes which respond to the C² system's control directives. The BM/C⁴ will provide the BMD system with the capability of planning, coordinating, directing, and controlling the surveillance and engagement operations of the system. It will consist of a distributed arrangement of personnel, equipment, communications, facilities, and procedures that will ensure timely human control of the BM/C⁴ consists of a battle planning function, an battle management process.

engagement planning function, and a battle execution function. (USSPACECOM)

The hub of the command and control process. It consists of computer hardware and software that integrates elements of the command and control system into a synergistic operation. (USSPACECOM)

The estimate of damage resulting from the application of military force against a predetermined objective. Battle damage assessments can be applied to the use of all types of weapons systems throughout the range of military operations. BDAs are primarily an intelligence responsibility with required inputs and coordination from the operators. BDA is composed of physical damage assessment, functional damage

assessment, and target system assessment.

Management

(BM)

Management/ Command, Control, Communications, and Computers (BM/C^4)

Battle Management **System**

Battle Damage Assessment (BDA)

Battle Debris

Battle Debris are the fragments produced by the hypervelocity collision of an interceptor with a ballistic missile, post-boost vehicle, or reentry vehicle, objects resulting from intentional fragmentation or accidental detonation of booster components, and objects normally associated with the deployment and propagation of threat objects (such as nuts, bolts, interstages, fairings, shrouds, etc.).

Battle Group

1. Domains into which the battle space is partitioned. 2. A data processing approach implemented in the battle management computer which minimizes the processing load by partitioning (grouping) threat data (Virtual Battle Group). 3. A group of associated system elements which operate together in a segment of the battle, based upon their capabilities and relative location to each other and the threat.

Battle Integration

Preplanning processes and/or real-time coordination that occurs to minimize resource wastage between battle tiers or battle partitions.

Battle Management Database

Battle Management data files including: battle management message file, object file, track file, discrimination file, engagement file, kill assessment file, and battle management health and status file.

Battle Management System Configuration

The battle management elements currently in the system together with their locations, connectivity and currently activated modes of operation.

Battle Manager

The automated set of hardware and software equipment that performs the battle management functions at an element.

Battle Plan

One of a set of BMD operational approaches to counter a ballistic missile attack. It contains the rules of engagement, battle strategy, and intercept tactics to be implemented by the battle management processors. It is directly responsive to the attack type (e.g., counterforce).

Battle Space

A characterization of the BMD area of operation generally expressed by Tier (Boost, Post-Boost, Midcourse, and Terminal). (USSPACECOM)

Battle Space Partitioning

Assignment of management, sensing, control and firing responsibilities to specific platforms/facilities within the deployed constellation of platforms/facilities.

Battlefield Coordination Element (BCE)

An Army liaison provided by the Army component commander to the Air Operations Center (AOC) and/or to the component designated by the joint force commander to plan, coordinate, and deconflict air operations. The battlefield coordination element processes Army requests for tactical air support, monitors and interprets the land battle situation for the AOC, and provides the necessary interface for exchange of current intelligence and operational data.

BBS Bulletin Board System.

BBSF Brass Board Seeker Flight.

BBT Booster Burn Time.

BCA Basing Concept Analysis.

BCAS

1. Battle Management and C³ Architecture Simulator.

2. Base Contracting Automated System.

BCBL Battle Command Battle Laboratory (USA, Ft. Levenworth, KS).

BCCE BM/C3 Consolidated Capabilities Effort.

BCD 1. Baseline Concept Description. 2. Baseline Concept Document.

BCE 1. Battlefield Coordinating Element. 2. See Baseline Cost Estimate.

BCFR Battle Command Focused Rotation.

BCIS Battlefield Combat Identification System (USA term).

BCM Baseline Correlation Matrix (AF).

BCO See Broad Concept of Operations.

BCP 1. Battery Command Post (HAWK). 2. Best Commercial Practices.

3. See BMDO Cost Position.

BCS 1. Beam Control System. 2. See Baseline Comparison System.

BCTP Battle Command Training Program (USA, Ft. Levenworth, KS).

BCV Battle Command Vehicle (USA term).

BCWP Budgeted Cost of Work Performed.

BCWS Budgeted Cost of Work Scheduled.

BD Baseline Description.

BDA See Battle Damage Assessment.

BDC Backgrounds Data Center, Naval Research Laboratory, Washington, D.C.

BDE Brigade (USA term).

BDL Battlefield Demonstration Laser.

BDP Baseline Data Package.

BDPI Baseline Data Package Integration.

BDS Boost Phase Detection System.

BDT See Birth-to-Death Tracking.

BDY Burst Detector Y Sensor.

Be Beryllium.

BE OBSOLETE. See Brilliant Eyes.

Beam Control Technologies associated with controlling the physical properties of high energy beams

and steering the energy transmitted by those beams to the target vehicle; also, the

management of signal or image beams within a complex sensor system.

Beam Width The angle between the directions, on either side of the axis, at which the intensity of the

radio frequency field drops to one-half the value it has on the axis.

BEAR Beam Experiment Aboard Rocket (Neutral Particle Beam Technology Validation

Experiment).

BEAST Battle Experiment Area Simulator Tracker.

BECO Before Engine Cutoff.

BECS Battlefield Electronic CEOI System (See also RBECS).

Bell-Lapadula A formal state transition model of computer security policy that describes a set of

Model access control rules.

BELLCORE Bell Communications Research, Incorporated.

BEP OBSOLETE. See Brilliant Eyes Probe.

BES 1. Budget Estimate Submission. 2. Budget Estimate Summary.

BESAM OBSOLETE. Brilliant Eyes Sensor Algorithm Manager.

BESC BM/C³ Element Support Center, JNTF, Falcon AFB, CO.

BESim OBSOLETE. Brilliant Eyes Simulator.

BESim/AT OBSOLETE. Brilliant Eyes Simulator Analysis Tool.

BESim/RT OBSOLETE. Brilliant Eyes Simulator Real-Time.

BEST BM/C3 Element Support Task.

BET Best Estimate Trajectory.

BFAC Blue Forces Analysis Center.

BFTT Battle Force Tactical Training.

BG Battle Group (USN term).

BGM Battle Group Manager.

BGSE Bus Ground Support System (USAF term).

BGV Boost Glide Vehicle.

BI 1. Background Investigation. 2. Briefing to Industry.

BIB Blocked Impurity Band.

BIC Battlefield Integration Center.

BID Built-In Diagnostics.

BIDS Biological Integrated Detection System.

Biennial Budget The FY86 DoD Authorization Act required the submission of two-year budgets for the

Department of Defense beginning with FY88/89. The department has institutionalized a biennial cycle for the Planning, Programming, and Budget System (PPBS). A biennial budget, as currently structured, represents program budget estimates for a two year

period in which fiscal year requirements remain separate and distinct.

Big Crow A suite of aircraft, helicopters, ground vans, and electronic equipment which are used to

emulate an electronic warfare environment for testing weapon systems on test ranges.

BIM Ballistic Intercept Missile.

Biological An item of material which projects, disperses, or disseminates a biological agent

Weapon including arthropod vectors.

BIOS Basic Input/Output System.

BIPS Billion Instructions Per Second.

Birth-to-Death The tracking of space objects (e.g., satellites, reentry vehicles, or decoys that simulate Tracking (BDT)

these) from the time they are deployed from a booster or post-boost vehicle until they

are destroyed.

Bistatic Radar A radar system that has transmitters and receivers stationed at two geographically

separate locations; a special case of multistatic radar.

BIT Built-in-Test

bit binary digit.

Bit Transfer The number of bits transferred per unit time, usually expressed in bits per second (bps).

Rate

BITE 1. See Built-in Test Equipment. 2. BESC Integration, Test & Evaluation.

Black Body An ideal body which would absorb all (and reflect none) of the radiation falling upon it.

Blackout The disabling of electronic equipment by means of nuclear explosion. The intense

electromagnetic energy by a nuclear explosion obscures signals and renders many types

of radar and other types of electronic equipment useless for minutes or longer.

BLADES BMD Long Wavelength Infrared Advanced Exoatmospheric Sensor.

BLADT Blast, Dust, Thermal Effects Model.

Blast Effect Destruction of or damage to structures and personnel by the force of an explosion on or

above the surface of the ground. Blast effect may be contrasted with the cratering and

ground-shock effects of a projectile or charge that goes off beneath the surface.

Blast Wave A sharply defined wave of increased pressure rapidly propagated through a surrounding

medium from a center of detonation or similar disturbance.

BLCCE OBSOLETE. BMDO Life Cycle Cost Estimate.

BLK Block (system production lot)

Blk IVA Navy Standard Missile Block IV-A. **Block** (Communication) This term is used to designate a portion of a multi-message packet

which is dedicated to a message contained within the packet.

Block Check Character (BCC) The result of a transmission verification algorithm accumulated over a transmission

block, and normally appended at the end, e.g., CRC, LRC.

Blue Forces Those forces used in a friendly role during exercises.

Blue Light Stand alone network development program.

BM 1. See Battle Management. 2. See Ballistic Missile.

BM ATD Battle Management Advanced Technology Demonstration.

BM/C³ See Battle Management/Command, Control, and Communications. See also CC/SOIF.

BM/C³ WG BM/C³ Working Group.

BM/C³I Battle Management/Command, Control, Communications, and Intelligence.

BM/C⁴I Battle Management/ Command, Control, Communications, Computers, and Intelligence.

BMAAT Battle Management Architecture Analysis Tool.

BMC Battle Management Center.

BMC3 TEx BMC3 Test Exerciser.

BMD See Ballistic Missile Defense.

BMD Element Program Manager (PM) A highly qualified individual responsible for day-to-day management and execution of a BMD element program consistent with PM authorities and responsibilities documented in DoDD 5000.1 and DoDI 5000.2.

BMD Event Assessment An evaluation of information that determines the potential or actual nature and objectives of an attack for the purpose of providing information for timely decisions. Event assessment for ballistic missile attack begins on receipt of event assessment information and continues throughout the attack. The objective of event assessment is to determine the origin of the attack, the country and/or theater under attack, the number and type of missiles/RVs involved in the attack, and what specific targets (impact points) are under attack. This determination may be made based on attack assessment quality launch and impact messages from external systems, information generated by BMD sensors, or any combination.

BMD Event Validation The human evaluation of whether an observed event is real or false. It is a statement of validity of a warning event determined by a human analysis of equipment, operational environment, and personnel actions. The basis for this judgment is dependent on both of the following: first, in the judgment of sensor site personnel reporting the event, the data exhibits characteristics consistent with pre-determined phenomena attributed to an actual event. Site personnel actions, and hardware and software performance, are determined to be within established system operation specifications. This is a valid site report. Second, when a site report is received at the BMD operations center, it undergoes system report analysis. This process may change the valid site report based on additional factors such as other site reports, intelligence information, and other data. Only after this process has been completed can a determination be made of event validation.

BMDA Ballistic Missile Defense Act.

BMDAC Ballistic Missile Defense Advisory Committee.

BMDAE Ballistic Missile Defense Acquisition Executive.

BMDARC Ballistic Missile Defense Acquisition Review Council.

BMDATC OBSOLETE. Ballistic Missile Defense Advanced Technology Center, Huntsville, AL.

BMDCC Ballistic Missile Defense Command/Control Center.

BMDM Ballistic Missile Defense Monitor.

BMDN Ballistic Missile Defense Network. Encompasses the mission-oriented local area and

wide area networks, facilities, hardware, software, network control and management procedure and capabilities used to link BMDO and the scientific and technical laboratories and DoD facilities (collectively, the National Test Bed) that support missile defense systems development, test and evaluation, and acquisition. The Joint National Test Facility (JNTF) at Falcon AFB, CO serves as the Executing Agent for the BMDN.

BMDO See Ballistic Missile Defense Organization.

BMDOC OBSOLETE. See Ballistic Missile Defense Operations Center.

BMDOICA See BMDO Independent Cost Assessment.

BMDP Ballistic Missile Defense Program.

BMDSCOM OBSOLETE. Ballistic Missile Defense Systems Command. Now USASSDC and as of

October 1, 1997, USASMDC.

BMDSSC OBSOLETE. Ballistic Missile Defense Systems Command. Changed to USASSDC and,

as of October 1, 1997, changed to USASMDC, Huntsville, AL.

BMEWS See Ballistic Missile Early Warning System.

BMIC Battle Management Integration Center.

BMO OBSOLETE. Ballistic Missile Office (AF).

BMP Battle Management Processor (C2E term).

BMT Ballistic Missile Threat.

BN Battalion

BN HQ Battalion Headquarters (USA/USMC term).

BN OC Battalion Operations Center (USA term).

BNL Brookhaven National Laboratory.

BOA 1. Battlefield Ordnance Awareness. 2. Basic Operating Agreement.

BOD Beneficial Occupancy Date (FAR construction contract term).

BOE Basis of Estimate.

BOIP Basis of Issue Plans.

BOM Bill of Material.

Boost

OBSOLETE. An Air Force sensor system in high earth orbit used for early warning, Surveillance and tracking of ballistic missiles, and attack assessment.

Tracking System

(BSTS)

Boost Phase That portion of the flight of a ballistic missile or space vehicle during which the booster

and sustainer engines operate.

Boost Segment Defense

The first phase of a ballistic missile trajectory during which it is being powered by its engines. During this phase, which usually lasts 3 to 5 minutes for an ICBM, the missile reaches an altitude of about 200 km whereupon powered flight ends and the missile begins to dispense its reentry vehicles. The other phases of missile flight, including midcourse and terminal, take up to the remainder of an ICBM's flight time of 25 to 30

minutes. (USSPACECOM)

Booster An auxiliary or initial propulsion system that travels with a missile or aircraft and that

may or may not separate from the parent craft when its impulse has been delivered. A

booster system may contain or consist of one or more units.

Booster Inventory Total force inventory.

BORRG Ballistic Missile Operational Requirements Review Group.

BOS Battlefield Operating System.

BOSS Background Optical Suppression Sensor.

Bottom-Up Review

(BUR)

A comprehensive review, initiated in March 1993, of the nation's defense strategy, force structure, modernization, infrastructure, and foundations. The BUR examined U.S. missile defense requirements from a perspective of identifying options that could meet

future needs at an affordable cost.

BP 1. See Brilliant Pebbles 2. See Boost Phase. 3. Battle Planning.

BPAC Budget Program Activity Code.

BPBM Boost Phase Battle Management.

BPHIT Brilliant Pebbles Hover Interceptor Test.

BPI 1. Boost Phase Intercept. 2. Boost Phase Interceptor.

BPI/E Boost-Phase Intercept/ Exoatmospheric Intercept.

BPL Boost Phase Leakage.

BPM Business Program Manager (Acquisition management term).

BPPBS Biennial Planning, Programming and Budgeting System.

BPS Bits per second (TelComm/Computer term). **BPT** Boost Phase Tracking.

BPT ATD Boost Phase Tracking Advanced Technology Demonstration.

BPTF OBSOLETE. Brilliant Pebbles Task Force.

BPTS Boost Phase Tracking System.

BPX Battle Plan Execution.

BRAC Base Realignment And Closure.

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.

BRDI Baseline Recompetition Document Integration.

Breadboard Configuration An experimental device (or group of devices) used to determine feasibility and to develop technical data. It will normally 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.

Break-Up

1. In detection by radar, the separation of one solid return into a number of individual returns which correspond to the various objects or structure groupings. This separation is contingent upon a number of factors, including range, beam width, gain setting, object size, and distance between objects. 2. In imagery interpretation, the result of magnification or enlargement which causes the imaged item to lose its identity and the resultant presentation to become a random series of tonal impressions.

Breakout

Execution of acquisition strategy to convert some parts or systems components from contractor furnished to government furnished. Rather than having prime contractor provide from its sources, government goes out to industry directly and procures items.

Brightness

The amount of power that can be delivered per unit solid angle by a directed energy weapon. As used in the BMD program, brightness is the measure of source intensity. To determine the amount of energy per unit area on a target, both source brightness and source-target separation distance must be specified.

Brilliant Eyes (BE)

OBSOLETE. Successor to Space-Based Surveillance and Tracking System (SSTS). BE is also known as the Space and Missile Tracking System (SMTS), and is now the LEO element of the SBIRS. See SBIRS.

Brilliant Eyes Probe (BEP)

OBSOLETE. The BE Probe is a concept for a ground launched probe version of the BE space-based satellite, analogous to the obsolete GSTS, that would leverage heavily the applicable BE Flight Demonstration System (FDS) developed equipment. BEP could be developed and deployed on a shorter schedule and could provide interim above-the-(radar) horizon threat tracking and precommit for the interceptor. The concept requires the addition of non-FDS LWIR sensor to a sub-set of the existing sensor complement, and is part of potential Contingency Deployment Options. Also called the Ground Launched Probe (GLP).

Brilliant Pebbles (**BP**)

OBSOLETE. Proliferated singlet space-based weapon with autonomous capability. (Now a subset of the Air Force's Advanced Interceptor Technologies (AIT) project.)

Broad Concept of Operations (BCO) An approved USSPACECOM planning concept for a complete SDS. It is a top-level

concept that is detailed in specific Phase Concepts of Operations.

BRP Basic Research Plan.

BRV Ballistic Reentry Vehicle. A generiic reentry vehicle, part of a ballistic missile target

system.

BS 1. Battle Staff. 2. Broadcast Source. 3. Bachelor of Science degree.

BSD Battlefield Situation Display.

BSL Base Support Listing.

BSTS See Boost Surveillance and Tracking System.

BT ATD Booster Typing Advanced Technology Demonstration.

BTH Below The Horizon.

BTI See Balanced Technology Initiative.

BTOC Battalion Tactical Operations Center (PATRIOT).

BTRY Battery.

BTS Baseline Target Set. A BMDO-approved listing and description of ballistic missile

targets which have been (or are being) developed to meet a variety of target users' needs, validated as threat representative, and accredited for specific applications.

BTTV Ballistic Tactical Target Vehicle.

BTY Battery.

Budget Activity1. A budget activity is a major subdivision of a budget appropriation, generally in mission areas. It records estimates for a component function or activity to be funded by

the appropriation. 2. Categories within each appropriation and fund account that identify the purposes, projects, or types of activities financed by the appropriation or fund.

Budget Authority Authority provided by law to enter into obligations which generally result in immediate

or future disbursements of Government funds. It may be classified by the period of availability, by the timing of congressional action or by the manner of determining the

amount available. Also known as obligational authority.

Budget Estimate Cost estimate prepared for inclusion in the DoD budget to support an acquisition

program.

Budget Estimate

Submit (BES)

The service submissions to OSD showing budget requirements for inclusion in the DoD budget. Every other autumn (even years) for two-year budget, every autumn of odd

years for amendment to second year of previously submitted two year budget.

Built-in Test Equipment (BITE) 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.

Bulk Filter The signal processing rejection of detected signals as not being related to objects of

interest. The removal of sensor observations from the track files that can be readily

assessed by location or signature as non-threat (e.g., stars, boost fragments, etc.).

BUR See Bottom-Up Review.

Burden Costs which cannot be attributed or assigned to a system as a direct cost. Alternative

term for overhead.

Burn Rate The monthly rate at which a contractor's funds are expended during the period of the

contract

Burn-Through

Range

The distance at which a specific radar can discern targets through the external

interference being received.

Burnout The point in time or in the missile trajectory when combustion of fuels in the rocket

engine is terminated by other than programmed cutoff.

Bus The platform (or "bus"), sometimes referred to as a post-boost vehicle, on a single

missile which carries all the warheads on that missile. May also carry penetration aids,

decoys, etc.

Bus Deployment

Phase

That portion of a missile flight during which multiple warheads are deployed on different paths to different targets (also referred to as the post-boost phase). The warheads on a single missile are carried on a platform or "bus" (also referred to as a post-boost vehicle), which has small rocket motors to move the bus slightly from its original path.

BV Boost Vehicle.

BVR Beyond Visual Range.

BW 1. See Biological Weapon. 2. Biological Warfare.

3. Bandwidth (Communications engineering term)

BY 1. Budget Year. 2. Base Year.

C 1. Communications. 2. Centigrade.

C Spec Product specification.

C&D 1. Cover and Deception. 2. Command and Decision.

C&D/A Command and Decision/Auxilliary.

C&DH Communications and Data Handling.

C++ Object oriented version of the C programming language.

C-B Chemical-Biological.

C/AHRS Compass, Attitude Heading Reference System (USA term).

C/SCSC Cost/Schedule, Control System Criteria.

C/SSR Cost Schedule Status Report.

C1 Capability One [C2=Capability Two, etc.] Nomenclature given to NMD Weapons

System's evolutionary designs.

C² See Command and Control.

C²E See Command and Control Element.

C²I Command, Control and Intelligence

C²P Command and Control Processor.

C²S Command and Control System.

C²SC Command and Control Simulation Center.

C²Sims Command and Control Simulations.

C2STN Command and Control System Test Network

C2TED C2 Theater Exploitation Demonstration.

C2v Command and Control Vehicle (USA term)

C2W Command and Control Warfare

Command, Control, and Communications.

C3CM See Command, Control, and Communications Countermeasures.

C³I See Command, Control, Communications, and Intelligence.

C³IIT C³I Integration Test.

C³ **TED** C³ Theater Exploitation Demonstration.

C4 Command, Control, Communications, and Computer Systems.

C4I Command, Control, Communications, Computers, and Intelligence.

C⁴I Sufficiency USAF Program to cut C4I redundancy and O&M costs.

C⁴ID Command, Control, Communications, Computers and Intelligence Dissemination.

C⁴IFTW Command, Control, Communications, Computers and Intelligence For The Warrior

(OJCS term).

C⁴ISR Command, Control Communications, Computers, Intelligence, Surveillance and

Reconnaissance.

C⁴S Command, Control, Communication, and Computer Systems.

CA Counter Air.

CA/CRL Custody Authorization/Custody Receipt List.

CAA Controlled Access Area.

CAB Cost Analysis Board (BMDO term).

CAB VTC Cost Analysis Board Video Teleconference.

CAC Combat Arms Command (USA, Ft. Levenworth, KS).

CAD 1. Computer-Aided Design. 2. Continental Air Defense.

CADCI Common Air Defense Communications Interface.

CADE Combined Allied Defense Experiment/Effort.

CAE 1. Computer-Aided Engineering. 2. Component Acquisition Executive.

CAESAR CONUS Attack Engagement Systems Requirements Simulation.

CAGE Commercial and Government Entity (Contracting term).

CAI Computer-Aided Inspection.

CAIG Cost Analysis Improvement Group.

CAIS Common Airborne Instrumentation System.

CAIV Cost As an Independent Variable.

CALM Characterization of Advanced Low Background Mosaic. CALM is a contractor operated

ground test facility for testing focal plane arrays. It is located in Anaheim, CA, and is

managed by USASSDC for BMDO.

CALS 1. Computer-aided acquisition logistic support.

2. Continuous acquisition and life-cycle support.

CAM Computer-aided manufacturing.

CAMDEN Cooperative Air and Missile Defense Exercise Network.

Campaign Plan A plan for a series of related military operations aimed to accomplish a common

objective, normally within a given time and space.

Candidate Sensors Any of the following sensors that could potentially be included in a National Missile

Defense deployment: UEWR (BMEWS, PAVE PAWS), HAVE STARE, COBRA DANE, Haystack/Millstone, Haystack Aux, COBRA JUDY, and potentially other

existing sensors.

CAO 1. Counter Air Operation. 2. Cost Accounting Officer.

CAOC Combat Air Operations Center.

CAP 1. Combat Air Patrol. 2. Civil Air Patrol. 3. Crisis Action Planning.

4. Configuration and Alarm Panel.

Capital Satellite A highly valued or costly satellite, as distinct from an inexpensive decoy satellite.

Some decoys might be so expensive as to be considered capital satellites.

CAPS Commanders Analysis and Planning Simulation.

Capstone Test and Evaluation Master Plan (Capstone TEMP) CAR A Test and Evaluation Master Plan which addresses the testing and evaluation of a defense system comprised of a collection of "stand alone" component systems which function collectively to achieve the objectives of the defense system.

function confectively to achieve the objectives of the defense system.

1. Command Assessment Review (AF). 2. Configuration Audit Review.

3. Contract Assessment Report.

CARD 1. See Cost Analysis Requirements Document.

2. Cost Analysis Requirements Description.

CARM Counter Anti-Radiation Missile (PATRIOT).

Carrier System A means of obtaining a number of channels over a single path by modulating each

channel upon a different "carrier" frequency, and demodulating at the receiving point to

restore the signals to their original form.

Carrier Vehicle

(CV)

A space platform whose principal function is to house the space-based interceptors in a

protective environment prior to use.

CARS Consolidated Acquisition Reporting System.

CAS 1. Close Air Support. 2. Computer-Aided Servicing. 3. Crisis Action System.

4. Cost Accounting Standard.

CAS/M Computer-Aided Servicing/Maintenance.

CASA Cost Analysis Strategy Assessment.

CASE 1. See Common Automated System Execution.

2. Computer-Aided Software Engineering

CASOM Conventionally Armed Stand Off Missile (USAF & UK RAF term).

CASREP Casualty Report (USN term).

CASS Consolidated Automated Support System.

CAST Commercial Acquisition Streamlining Team (USAF team name).

CAT 1. Computer Aided Testing. 2. Crisis Action Team. 3. Category.

4. Committee on Applications and Technology.

Cat House A second-generation Soviet phased array radar that augments Moscow's existing search

and target acquisition radars (Dog House). It also enhances their battle management

capabilities.

CATEX Categorical Exclusion (environmental term).

CATO 1. Combined Arms Tactical Operations (US Army).

2. OBSOLETE. Common Automated Tactical Operations.

CATS Computer Aided Test System.

CATT Combined Arms Tactical Trainer (USA term).

CB Chemical Biological.

CBD 1. Commerce Business Daily. 2. CINC BM/C³ Demonstrator.

CBM 1. Central Battle Management.

CBO Congressional Budget Office.

CBR 1. Chemical, Biological, Radiological. 2. Concurrent Budget Resolution.

3. Chemical, Biological and Radiological [weapons].

CBS Corps Battle Simulation (USA term).

CBTDEV Combat Developer (USA term).

CBU 1. Cluster Bomb Unit. 2. Conference Bridge Unit.

CBW Chemical Biological Warfare.

CC 1. Command and Control. 2. Command Center.

3. Air Force Commander office symbol.

CC/SOIF OBSOLETE. Command Center/System Operation and Integration Functions. (See C²E

and SOIF.)

CCA 1. Contingency Capabilities Assessment. 2. Carrier-Controlled Approach.

3. Circuit Card Assembly.

CCA(ICE) Component Cost Assessment (Independent Cost Estimate).

CCB 1. Community Counterterrorism Board. 2. Configuration Control Board.

3. Change Control Board.

CCC 1. CINC Command Complex. 2. Component Command Center.

3. Consolidated Command Center (NMD BMC3 term).

CCC (BMD) See Consolidated Command Center (CCC) (BMD).

CCCI Command, Control, Communications and Intelligence.

CCCS Common Communications Component Set.

CCD 1. Charge-Coupled Device. 2. Camouflage, Concealment, and Deception.

CCE OBSOLETE. Command Center Element of the SDS C2E. Under NMD MDAP called the

BM/C3 Element.

CCEB Combined Communications-Electronics Board (NATO term).

CCEP Commercial COMSEC Endorsement Program.

CCEV Command Center Experimental Version.

CCI Controlled Cryptographic Item.

CCIS Command and Control Information System.

CCL 1. Commodity Control List.

2. Commerce Control List [Commerce Department].

CCM See Counter-Countermeasures.

CCMPS Counter-Countermeasure Parametric Study.

CCN 1. Contract Change Notice. 2. Configuration Change Notice.

CCP Contract Change Proposal (Contracting term).

CCP002 Contract Change Proposal (and number) (Contract Administration term).

CCS 1. Command and Control Segment (USAF SCN-related term)

2. Communications Control Set (USA term). 3. Combat Control System.

CCTV Closed Circuit Television.

CD 1. Concept Definition. 2. Contingency Deployment. 3. Combat Developments.

CD/V Concept Demonstration/ Validation (DD 5000 term).

CDA Central Design Activity (USAF term for Software Engineering Center).

CDB Central DataBase (USN term).

CDCC Classified Document Control Center.

CDD Concept and Development Definition.

CDE Conference on Confidence and Security-Building Measures and Disarmament in Europe.

CDI 1. Conventional Defense Initiative. 2. Compressed Data Interface.

3. Classification, Discrimination, and Identification (PATRIOT).

CDMA Code Division Multiple Access [Receiver].

CDO Contingency Deployment Option.

CDP Contingency Deployment Planning.

CDR 1. Component Design Requirement. 2. See Critical Design Review.

3. Contract Data Requirement.

CDRL See Contract Data Requirements List.

CDS Congressional Descriptive Summary.

CDSSI Common Data Sharing System Infrastructure.

CDT&E Contractor Development Test and Evaluation.

CDV Concept Definition Vehicle.

CE 1. Concurrent Engineering. 2. Communications Enhancements (PATRIOT).

3. Corps of Engineers/Civil Engineers. 4. Concept Exploration. 5. Cooperative Engagement (see also CEC). 6. Current Estimate.

7. Communications-Electronics. 8. Command Element. 9. Common Environment. 10. Communications/Electronic.

CE&T Common Environments & Tools.

CE/D Concept Exploration/Definition Phase.

Cease In air defense, a fire control order used to direct units to stop the firing sequence against

Engagement a designated target. Guided missiles already in flight will continue to intercept.

Cease Fire A command given to refrain from firing on, but to continue to track objects. Missiles

already in flight will be permitted to continue to intercept.

CEATM Cost Effectiveness At The Margin.

CEC Cooperative Engagement Capability.

CECOM U.S. Army Communications Electronics Command, Ft. Monmouth, NJ.

CED Concept Exploration and Development.

CEEM Cost-Effectiveness Evaluation Model.

CELSA Cost Estimate Logistics Support Analysis. [Methodology for estimating logistics support

costs].

CELV Complementary Expendable Launch Vehicle.

CEM Combined Effects Munition.

CENTAF [US] Central Command Air Force.

CENTAG Central Army Group (NATO).

CENTCOM [US] Central Command.

Centralized The control mode whereby a higher echelon makes direct target assignments to fire

Control units. (USSPACECOM)

Centralized Operational concept which specifies that critical C² is collected and key C² decisions Command

are performed at a central location by USCINCSPACE, or his designee, to ensure

continuous and positive human control over the system.

Centralized Management The concept of using a single, designated management authority. It includes system

management, program/project management, and product management.

CEO Chief Executive Officer.

CEOI Communications Electronics Operating Instructions.

CEP 1. See Circular Error Probable. 2. Consolidated Evaluation Process.

CEQ Council on Environmental Quality.

CERES Center for Research Support, NTF, Falcon AFB, CO.

CERT Computer Emergency Response Team.

Certification The technical evaluation of a system's security features, made as a part of and in

> support of the approval/accreditation process, that established the extent to which a particular computer system's design and implementation meet a set of specified security

requirements.

CES 1. Cost Element Structure. 2. Civil Engineering Squadron.

CEST CINC Exercise Support Team (BM/C3 warfighter exercise term.)

CET Concurrent Engineering Team.

CETEC Corps of Engineers Topographic Engineering Center, Location???.

CEU Cooling Equipment Unit.

CEWG Civil Engineering Working Group.

CFA Center for Architecture (JIEO term).

CFAA Computer Fraud and Abuse Act.

CFC Combined Forces Command, Korea.

CFE 1. Conventional Forces Europe. 2. Contractor Furnished Equipment.

3. Center for Engineering (JIEO term).

4. Commercial Equivalent Equipment (USA IFTE term).

CFEL Contractor Furnished Equipment List.

CFI Contractor Furnished Information.

CFI&I Center for Integration and Interoperability (JIEO term).

CFO Chief Finance Officer.

CFP Contractor Furnished Property.

CFR Code of Federal Regulations. **CFS** Center for Standards (JIEO term).

CFSR Contractor Funds Status Report.

CG 1. USN guided missile cruiser. 2. Coast guard. 3. Chairman's Guidance (JCS). 4.

Commanding General. 5. Center of Gravity. 6. Comptroller General.

7. Cobra Gemini, a BM/C3 warfighter exercise.

8. Cobra Gemini, an Air Force radar deveolpment program at Hanscom AFB, MA.

CGA Color Graphics Adapter (TelComm/Computer term).

CGS 1. Common Ground Station (Part of Joint STARS).

2. Continental Ground Station.

Chaff 1. Radar confusion reflectors, which consist of thin, narrow metallic strips of various

lengths and frequency responses, used to create false echoes for confusion purposes. 2. Confetti-like metal foil ribbons which can be ejected from spacecraft (or terrestrial vehicles) to reflect enemy radar signals, thereby creating false targets or screening

actual targets from the "view" of radar.

Chaff Puff Volume of space containing a relatively high density of chaff.

Chairman's Program

Assessment (CPA)

Summarizes the views of the Chairman, Joint Chiefs of Staff, on the balance and capabilities of the Program Objective Memorandum (POM) force and the support levels to attain national security levels. The CPA assists the Secretary of Defense in decisions

on the FYDP subsequent to receipt of the POMs.

CHAMP Composite High Altitude Maneuvering PBV.

Change of Operational Control (CHOP) The date and time at which the responsibility for operational control of a force or unit passes from one operational control authority to another.

Change Order Unilateral written order to a contractor to modify a contractual requirement within the

scope of the contract, pursuant to the changes clause contained in the contract.

CHARM Composite High Altitude Radiation Model.

Checkpoint Event or point in time during the program before which decision criteria must be met. If

decision criteria are not met, BMDO may decide that the program may not proceed through the checkpoint. A checkpoint may correspond to an event such as a program review, test event, or contract award; it may also correspond to a point in time, e.g. six

months after contract award.

Chemical Agent A chemical substance which is intended for use in military operations to kill, seriously

injure, or incapacitate personnel through its physiological effects. Excluded from consideration are riot control agents, herbicides, smoke, and flame. See also Biological

Agent.

Chemical Laser A laser in which chemical action is used to produce the laser energy.

Cheyenne Mountain Air Force Base (CMAFB) CMAFB provides the primary facilities for the command, operations, and processing centers which support the correlation and assessment functions of the ITW/AA system.

CHIPS Clearing House for Interbank Payments.

CHOP 1. Countermeasures Hands-On Program. Also known as the BMDO Countermeasures

Skunkworks. 2. See Change of Operational Control.

CHS Common Hardware and Software.

CI 1. Counterintelligence. 2. See Configuration Item.

3. Capability Increment.

CI-(n) Capability Increment (Number), e.g., CI-2, (NMD BMC3 term).

CIA Central Intelligence Agency (US).

CIAC Computer Incident Advisory Capability.

CIC 1. NORAD/USSPACECOM Combined Intelligence Center.

Combat Information Center. (U.S. Navy).
 Content Indicator Code.
 Communications Interface Controller.
 Computer Information Center.

6. Combat Integration Capability (USAF term).

CIDR Configuration Item Design Review.

CIDS 1. Control, Instrumentation and Diagnostic Systems

2. Critical Item Development Specification.

CIDSE Consolidated Integrated Development Support Environment.

CIEL Certification and INFOSEC Engineering Laboratory.

CIF CINC Initiative Fund.

CIFMS Center for Integrated Mission support (JIEO term).

CIL Critical Items List.

CIM 1. Computer-Integrated Manufacturing.

2. Center for Information Management (JIEO term).

3. Corporate Information Management.

CINC Commander-in-Chief.

CINC Decision

Set

A group of decisions available to USCINCSPACE to control his forces, including determining operational state, DEFCON, hostile intent, authorizing engagement, selecting preplanned response options, withholding weapons, overriding system

directives, and terminating engagement.

CINCNORAD Commander-in-Chief, North American Aerospace Defense Command.

CINCSAC Commander-in-Chief, US Strategic Air Command (Now see CINCSTRAT).

CINCSTRAT Commander-in-Chief, US Strategic Command.

CIOTE Commander's Integrated Open System Technology Evaluator.

Cipher System A cryptographic system in which cryptography is applied to plain text elements of equal

length.

Ciphertext Unintelligible text or signals produced through the use of cipher systems.

CIPT 1. Cost As an Independent Variable (CAIV) IPT.

2. Cost Integrated Product Team.

Circular Error Probable (CEP) An indicator of the delivery accuracy of a weapon system, used as a factor in determining probable damage to a target. It is the radius of a circle within which half of a missile's projectiles are expected to fall or there is a 50% probability that a single

projectile shall impact.

CIRIS Completely Integrated Reference Instrumentation System.

CIRRIS Cryogenic Infrared Radiance Instrumentation for Shuttle.

CIS 1. Commonwealth of Independent States (FSU). 2. Common Item Support.

3. Communications Interface Shelter.

CISF Centralized Integration Support Facility.

CISS Center for Information Systems Security (JIEO term).

CITE Common Integrated Tactics Execution (USAF term).

CITIS Contractor Integrated Technical Information Service.

CIWS Close-In Weapon System.

CJ Cobra Judy, name of a surveillance radar.

CJCS Chairman of the Joint Chiefs of Staff.

CJTF 1. Commander, Joint Task Force. 2. Combined Joint Task Force.

CL Chemical Laser.

CLC Command Launch Computer (HARM term).

CLE Command and Launch Equipment.

CLEMENTINE A flight program to demonstrate lightweight spacecraft technologies.

CLEO Conference on Lasers and Electro-Optics (See EQEC).

CLGP Cannon-Launched Guided Projectile.

CLIN Contract Line Item Number.

Objects (CSO)

Closely Spaced Entire or partial object clusters that cannot be resolved to individual objects due to their

close proximity and/or exceeding the sensor resolution capability due to the range or the

lack of suitable sensor viewing angles.

Closure In transportation, the process of a unit arriving at a specified location. It begins with the

arrival of the first element at a designated location and ends with the arrival of the last.

CLS 1. Command and Launch Station. 2. Contractor Logistic Support.

Clump Two or more objects that give rise to a single observation, e.g., an extended object

consisting of at least two unresolved closely spaced objects.

Cluster 1. A total collection of objects each of which is within some metric distance of at least

one other object in the collection. 2. A total collection of objects each of whose image on the focal plane of a sensor is within some metric distance of the image of at least one other object in the collection. 3. A set of objects with similar state vectors (based on truth). For example, a reentry vehicle and its penaids deployed at virtually the same time from a post-boost vehicle. 4. For BM/C³ purposes, a cluster is a group of objects any one of which can be engaged by an interceptor launched at the centroid of the

cluster, possibly before the cluster is resolved into separate objects.

Cluster Dispersion The rate of expansion of a cluster in meters/sec or angle/sec.

Cluster Set A group of object clusters and debris that originated from a single missile.

Clutter Permanent echoes, cloud, or other atmospheric echo on radar scope.

CM 1. See Countermeasures. 2. See Configuration Management. 3. Cruise Missile. 4.

Chairman's Memorandum. 5. Control Modem

cm Centimeter.

CM Composite Material.

CM/SM Communications Manager/Security Manager.

CMA&I Countermeasures, Assessments and Integration.

CMAS Cheyenne Mountain Air Station, CO.

CMD 1. Cruise Missile Defense. 2. Command.

CMDI Cruise Missile Defense Initiative.

CMEST Cruise Missile Engagement Systems Technology.

CMF 1. Common Mode Failure. 2. Conjugate Matched Filter.

CMG Control Moment Gyro.

CMI Countermeasure Integration.

CMM Capability Maturity Model.

CMO Central MASINT Office (DIA).

CMOC Cheyenne Mountain Operations Center, Cheyenne Mountain AS, CO.

CMOP Counter Missile Operations Plan.

CMOS Complementary Metal Oxide Semiconductor.

CMP 1. Configuration Management Plan. 2. Counter Military Potential.

3. Communications Message Processor. 4. Contractor Management Plan.

CMRS Calibration Measurement Requirements Summary.

CMS Cheyenne Mountain Support.

CMTC Combat Maneuver Training Center(USA, Ft. Levenworth, KS).

CMTS Cheyenne Mountain Training System.

CMTSS Cheyenne Mountain Training and Simulation Support.

CMW Compartmented Mode Workstation.

CNA Center for Naval Analyses.

CNAD Conference of National Armaments Directors (NATO term).

CNC Computer Numerical Control.

CNM Communications Network Manager (C2E term).

CNO Chief of Naval Operations.

CNTB Communications Network Test Bed.

CNWDI Critical Nuclear Weapons Design Information.

CO 1. Contracting Officer. 2. Change Order. 3. Commanding Officer.

Co-Production Production of a defense system in two or more countries. Involves the transfer of

production technology and complex or sensitive subsystem components from the country of origin to countries producing the system. Recipient may expand production to include

subsystems and components.

COA See Course of Action.

COAST Computer Operation, Audit, and Security Technology.

COB Close of Business.

Cobra Ball Modified EC--130 OAMP aircraft (see Cobra Eye).

Cobra Dane L-Band phased array radar at Shemya AFB, AK.

Cobra Eye Formerly a modified EC-135, IR/EO sensors, Shemya AFB, AK, but since retired..

Cobra Gemini Ship-based S-Band Radar development program with both shore and ship basing options.

Cobra Judy Shipborne phased array radar.

COC Combat Operations Center.

COCOM 1. See Combatant Command. 2. Coordinating Committee [against spread of key

technologies to Communist countries, i.e., Multilateral Export Controls].

COCOMO Constructive Cost Model (COEA, now JAE, term).

Code Template A software tool used to develop a module for multiple general applications.

CoDR Conceptual Design Review.

COEA Cost and Operational Effectiveness Analysis (term now used, c. 1996, is JEA).

Coherence The matching, in space (transverse coherence) or time (temporal coherence), of the

> wave structure of different parallel rays of a single frequency of electromagnetic radiation. This results in the mutual reinforcing of the energy of a larger beam. Lasers

and radar systems produce partially coherent radiation.

COI 1. Critical Operational Issues. 2. Combat Operations Intelligence.

COIC Critical Operational Issues and Criteria.

COIL Chemical Oxygen-Iodine Laser.

Collocation The physical placement of two or more detachments, units, organizations, or facilities at

a specifically defined location.

COM 1. Collections Operations Management. 2. Commander. 3. Command.

COM₃ Common Communications Components (C2E term).

COMAFFOR Commander, Air Force Forces.

COMAFSPACE Commander, Air Force Space Command.

COMARFOR Commander, Army Forces.

COMARSPACE Commander, Army Space Command.

Combat Area A restricted area (air, land, or sea) that is established to prevent or minimize mutual

interference between friendly forces engaged in combat operations. See also Combat

Zone.

Combat

The determination of the overall effectiveness of force employment during military Assessment (CA) operations. Combat assessment is composed of three major components: a) battle

damage assessment, b) munitions effects assessment, and c) reattack recommendation. The objective of combat assessment is to recommend the course of military operations. The J-3 is normally the single point of contact for combat assessment at the joint force

level, assisted by the joint force J-2.

Combat **Information** Center

The agency in a ship or aircraft manned and equipped to collect, display, evaluate, and disseminate tactical information for the use of the embarked flag officer, commanding officer, and certain control agencies. Certain control, assistance, and coordination

functions may be delegated by command to the combat information center. Also called

Action Information Center.

Combat Readiness Synonymous with operational readiness, with respect to missions or functions performed

in combat.

Combat Ready Synonymous with operationally ready, with respect to missions or functions performed in

combat.

Combat Service

Support

The essential logistic functions, activities, and tasks necessary to sustain all elements of an operating force in an area of operations. Combat service support includes

administrative services, chaplain services, civil affairs, finance, legal services, laundry,

etc.

Combat Support Fire support and operational assistance provided to combat elements. Combat support

includes artillery, air defense artillery, engineer, military police, signal, and military

intelligence support.

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.

Combatant Command (COCOM)

Non-transferable command authority established by title 10, United States Code, section 164, exercised only by commanders of unified or specified combatant commands. Combatant Command (command authority) is the authority of a Combatant Commander to perform those functions of command over assigned forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction over all aspects of military operations, joint training, and logistics necessary to accomplish the missions assigned to the command. Combatant Command (command authority) should be exercised through the commanders of subordinate organizations; normally this authority is exercised through the Service component commander. Combatant Command (command authority) provides authority to organize and employ commands and forces as the CINC considers necessary to accomplish assigned missions. Also called COCOM. See also Combatant Commander.

Combatant Commander

A commander-in-chief of one of the unified or specified combatant commands established by the President.

Combined Doctrine

Fundamental principals that guide the employment of forces for two or more nations in coordinated actions toward a common objective. It is ratified by participating nations.

Combined Force

A military force composed of elements of two or more allied nations.

Combined Operation

An operation conducted by forces of two or more allied nations acting together to accomplish a single mission.

COMINT

See Communications Intelligence.

COMM

Communications.

COMM CON

Communications Control.

Command

For command-oriented functions, the authorization required to perform command operations.

Command and Control (C²)

The exercise of authority and direction by properly designated commanders over assigned forces to accomplish the mission. Command and control functions are performed through a hierarchical arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.

Command and Control Element (C²E)

Distributed informed system consisting of processors, software, man-machine interfaces, and communications media that provides USCINCSPACE with the capability to plan, command, and control BMD operations.

Command and Control System

The facilities, equipment, communications, procedures, and personnel essential to a commander for planning, directing, and controlling operations of assigned forces pursuant to the missions assigned.

Command Center (CC)

A facility from which a commander and his representatives direct operations and control forces. It is organized to gather, process, analyze, display, and disseminate planning and operational data and perform other related tasks.

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Command Destruct Signal

A signal used to intentionally activate the destruction system in a missile.

Command Guidance A guidance system wherein intelligence transmitted to the missile from an outside source causes the missile to traverse a directed flight path.

Command Net

A communications network which connects an echelon of command with some or all of its subordinate echelons for the purpose of command control.

Command Post Exercise (CPX) An exercise in which the forces are simulated, involving the commander, his staff, and communications within and between headquarters.

Command Verification The verification of commands from the Battle Manager or Operational Commander prior to execution to confirm the command was correctly received and properly issued.

Command, Control, and Communications Countermeasures (C³CM) 1. Counter C^3 - That division of C^3CM comprising measures taken to deny adversary commanders and other decision makers the ability to command and control their forces effectively. 2. C^3 Protection - That division of C^3CM comprising measures taken to maintain the effectiveness of friendly C^3 despite adversary counter - C^3 actions.

Command,
Control,
Communications,
and Computer
Systems
(C⁴ Systems)
Command,
Control,
Communications,

Integrated systems of doctrine, procedures, organizational structures, personnel, equipment, facilities, and communications designed to support a commander's exercise of command and control, through all phases of the operational continuum.

and Intelligence (C³I)
Commander-inChief United States
Space Command
(USCINCSPACE)

1. Procedures and technologies supporting command and control, communications, and intelligence requirements, including those interfaces affecting systems external to the Strategic Defense System. 2. One of the four pillars of TMD capability. Coordination of other pillars and integration of the entire TMD system into overall combat operations.

The unified commander of USSPACECOM responsible for Ballistic Missile Defense and other assigned missions e.g., Space Control, Space Support, and Space Defense.

COMMARFOR

Commander, Marine Forces.

Commit

The process of committing one or more interceptor vehicles against a target track.

Commitment

A firm administrative reservation of funds for future obligations by the local comptrollers. Based upon firm procurement directives, orders, requisitions, authorizations to issue travel orders, or requests.

Common Automated System Execution (CASE) An Army segment of the Command and Control Element responsible for the SDS functions which task the associated sensors and weapons (e.g., WTA) and process the information resulting from those taskings (e.g., perform multi-sensor track function). Expected to consist of survivable computer hardware and software.

Common Mode Failure A type of system failure in which diverse components are disabled by the same single cause.

Comms

Communications.

Communication Control Character A functional character intended to control or facilitate transmission over data networks. There are 10 control characters specified in ASCII which form the basis for character-oriented communications control procedures.

Communications Intelligence (COMINT) Technical and intelligence information derived from foreign communications by other than intended recipients.

Communications Data Base Communications data files and updates including, but not limited to, communications message file, network management file, information management file, link quality file, synchronization file, security file and communications health and status file.

Communications Security (COMSEC) The protection resulting from all measures designed to deny unauthorized persons information of value which might be derived from the possession and study of telecommunications, or to mislead unauthorized persons in their interpretation of the results of such possession and study. Communications security includes (1) Cryptosecurity; (2) Transmission security; (3) Emission security; and (4) Physical security of communications security materials and information.

Communications System Segment (CSS) The communications front end for all Cheyenne Mountain Air Force Base (CMAFB) missions for non-common user traffic, performing circuit and message switching.

Communications System

Coordination of timing among communications system elements to permit transmission/reception of messages/data which may be distorted by time delays and Doppler shifts between communications nodes.

System Synchronization

Communications Zone Rear part of the theater of operations (behind but contiguous to the combat zone) which contains the lines of communications, establishments for supply and evacuation, and other agencies required for the immediate support and maintenance of the field forces.

COMNAV-SEASYSCOM

Commander, Naval Sea Systems Command.

COMNAV-SPACECOM

COMNAVFOR

COMNAVSECGR

COMOPTEVFOR

Commander, Naval Space Command.

Commander, Naval Forces.

Commander Naval Security Group.

IJ

COMOCK Computer Mock-up.

computer wock up

Comp Completion.

COMPASS Common Operational Mission Planning and Support System (Army term).

Commander, Operational Test and Evaluation Force (Navy).

COMPES Contingency Operations/Mobility Planning and Executing System.

Component Acquisition Executive A single official within a DoD component who is responsible for all acquisition functions within that Component. This includes Service Acquisition Executives for the Military Departments and Acquisition Executives in other DoD components who have acquisition management responsibilities.

Component Command Centers The Component Command Centers (which will contain Army and Air Force unique capabilities) will be capable of supporting the USSPACECOM Command Center and distributed Operations Centers by functioning as "Hot Backups" to provide for BM/C^3 availability and survivability. The Component Command Centers will be capable of executing real-time control of BMD engagement operations.

Component Program

A major defense acquisition program delegated to the Military Department of Defense

Agency for management.

Compton Electron An electron of increased energy ejected from an atom as a result of a Compton

interaction with a photon. (See Compton Effect.)

Compton Current Electron current generated as a result of Compton processes. (See Compton Effect and

Compton Electron.)

Compton Effect The scattering of photons (of gamma or x-rays) by the orbital electrons of atoms. In a

collision between a (primary) photon and an electron, some of the energy of the photon is transferred to the electron which is generally ejected from the atom. Another (secondary) photon, with less energy, then moves off in a new direction at an angle to

the direction of motion of the primary photon. (See Scattering.)

Computer Security (COMPUSEC) OBSOLETE. See INFOSEC.

Computer Software Configuration Item (CSCI) An aggregation of software that satisfies an end use function and is designated by the Government for separate configuration management. CSCIs are selected based on tradeoffs among software function, size, host or target computers, developer, support concept, plans for reuse, criticality, interface considerations, need to be separately

documented and controlled, and other factors.

COMSAT Communications Satellite Corporation.

COMSEC See Communications Security.

Concept
Exploration &
Definition

The initial phase (Phase 0) of the system acquisition process, beginning at Mission Need Determination. During this phase, the acquisition strategy is developed, system alternatives are proposed and examined, and the system program requirements document is expanded to support subsequent phases.

Concept of Operations (CONOPS)

A verbal or graphic statement, in broad outline, of a commander's assumptions or intent in regard to an operation or series of operations. The concept of operations frequently is embodied in campaign plans and operation plans; in the later case, particularly when the plans cover a series of connected operations to be carried out simultaneously or in succession. The concept is designed to give an overall picture of the operation. It is included primarily for additional clarity of purpose.

Concept Plan An operation plan in concept format. Also called CONPLAN.

Concurrency Part of an acquisition strategy which combines or overlaps two or more phases of the

acquisition process, or combines development T&E with operational T&E.

Concurrent Engineering

A systematic approach to the integrated, simultaneous design of products and their related processes, including manufacture and support. This approach is intended to cause developers, from the beginning, to consider all elements of the system life cycle from requirements development through dispersal, including cost, schedule, and

performance.

CONEX CONOPS Exerciser.

Configuration A collection of an item's descriptive and governing characteristics, which can be

expressed (1) in functional terms (i.e., what performance the item is expected to achieve); and (2) in physical terms (i.e., what the item should look like and consist of

when it is built).

Configuration Audit

One of the Configuration Management tasks which includes a functional configuration audit (FCA) to validate that the development of a configuration item has been completed satisfactorily and that the configuration item has achieved to specified performance and functional characteristics, and also includes a physical configuration audit (PCA) to verify that the configuration item "As Built" conforms to the technical documentation which defines the configuration item.

Configuration Item (CI)

An aggregation of system elements that satisfies an end use function and is designated by the Government for separate configuration management. Configuration items vary widely in complexity, size, and type. Any item required for logistic support and designated for separate procurement is a configuration item. Configuration items are traceable to the work breakdown structure (WBS).

Configuration Baseline

The configuration documentation formally designated by the Government at a specific time during a system's or configuration item's life cycle. Configuration baselines, plus approved changes from those baselines, constitute the current configuration baselines, namely the functional, allocated, and product baselines.

Configuration Control

One of the Configuration Management tasks that involves the systematic evaluation, coordination, approval, or disapproval of proposed changes to the design and construction of a configuration item whose configuration has been formally approved.

Configuration Identification

One of the Configuration Management tasks which requires that, for every change that is made to an Automated Data Processing (ADP) system, the design and requirements of the changed version of the system should be identified.

Configuration Management (CM)

In computer modeling and simulation, a discipline applying technical and administrative oversight and control to identify and document the functional requirements and capabilities of a model or simulation and its supporting databases, control changes to those capabilities, and document and report the changes. See also Accreditation.

CONOPS See Concept of Operations.

CONPLAN Concept Plan.

CONS Contracting Squadron.

Consolidated Space Operations Center (CSOC)

Series of centers at Falcon AFB, CO which operationally control and maintain assigned DoD satellites.

Consolidated Space Test Center (CSTC)

Series of centers at Onizuka AFB, CA (Sunnyvale), which support launch and initial onorbit checkout of operational satellites, operate R&D satellites, and serves as a backup to CSOC for operational DoD satellites.

Consolidated Command Center (CCC)

A single command center from which USCINCSPACE/CINCNORAD can direct all his assigned missions, to include BMD. (USSPACECOM) Located in Colorado Springs, CO.

Consolidated Intelligence Watch (CIW)

A consolidation of intelligence watch functions within the Intelligence Operations Center (IOC) consisting of the USSPACECOM ITW Center, the NORAD Aerospace Defense Intelligence Center (ADIC), and the Air Force Space Command Space Intelligence Element (SIE).

Constellation Size (CSIZE)

The number of satellites of a particular system placed in orbit about the earth.

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Contact Fuse

Device used to detonate warhead on physical contact with another object.

Contingency Deployment Plan (CDP) An executable plan designed to deploy an early missile defense capability and reduce deployment time. The plan provides specific executable deployment options and describes activities required before and after a deployment decision. The plan also allows decision makers to have oversight on technical progress, cost, schedule, and risks associated with a deployment system.

Continuity of Command

The degree or state of being continuous in the exercise of the authority vested in an individual of the armed forces for the direction, coordination, and control of military forces.

Continuity of Operations The degree or state of being continuous in the conduct of functions, tasks, or duties necessary to accomplish a military action or mission in carrying out the national military strategy. It includes the functions and duties of the commander, as well as the supporting functions and duties performed by the staff and others acting under the authority and direction of the commander. See Devolution of Command.

Contract Administration Office (CAO) The activity identified in the DoD Directory of Contract Administration Services Components assigned to perform contract administration responsibilities. It is a general term and includes Defense Contract Management Regions (DCMRs), Defense Contract Management Area Operations (DCMAOs), and Defense Plant Representative Offices (DPROs). (Defense Systems Management College Glossary)

Contract Data Requirements List (CDRL)

Document used to order ("buy") and require delivery of data. Tells contractor what data to deliver, when and how it will be accepted, where to look for instructions, etc.

Contract Definition

A funded effort, normally by two or more competing contractors, to establish specifications, to select technical approaches, to identify high-risk areas, and to make cost and production time estimates for developing large weapons systems.

Contract Work Breakdown Structure Contracting Officer (CO) The complete WBS for a contract, developed and used by a contractor within the guidelines of MIL-STD 881A, and in accordance with the contract statement of work.

A person with the authority to enter into, administer, or terminate contracts and make related determinations and findings. The term includes any authorized representatives of the CO acting within the limits of their authority. A CO whose primary responsibility is to administer contracts is an Administrative Contracting Officer. One whose primary responsibility is to terminate contracts and/or settle terminated contracts is a Termination Contracting Officer. A single contracting officer may be responsible for duties in any or all of these areas.

Control

Authority that may be less than full command exercised by a commander over part of the activities of subordinate or other organizations.

Control Abstraction (Software) The process of extracting the essential characteristics of control by defining abstract mechanisms and their associated characteristics while disregarding low-level details and the entities to be controlled.

Control Procedure The means used to control the orderly communication of information between stations on a data link. Also called line discipline. (See Protocol.)

Control and Reporting Center An element of the US Air Force tactical air control system, subordinate to the tactical air control center, from which radar control and warning operations are conducted within its area of responsibility.

Control and Reporting Post An element of the US Air Force tactical air control system, subordinate to the control and reporting center, that provides radar control and surveillance within its area of responsibility.

Control Area

A controlled airspace extending upwards from a specified limit above the Earth.

Control Station

The station on a network which supervises the network control procedures such as polling, selecting, and recovery. It also is responsible for establishing order on the line in the event of contention, or any other abnormal situation, arising between any stations on the network.

Control Zone

The space, expressed in feet or radius, that surrounds equipment that is used to process sensitive defense information and that is under sufficient physical and technical control to preclude an unauthorized entry or compromise.

Controlled Environment Area where entry into the radiation hazard area is controlled.

CONUS

1. Continental United States. 2. Contiguous United States

Conventional Co-Production An effort between governments to produce the same end item, or components of the same end item, in concert.

Conventional Weapon

A weapon that is neither nuclear, biological, nor chemical.

Coop Cooperative.

Coordinated Engagement Planning/Actions Coordinating Authority Necessary coordination among engagement components to ensure maximum effectiveness of the SDS and resources are not wasted on targets already targeted.

A commander or individual assigned responsibility for coordinating specific functions of activities involving forces of two or more Services or two or more forces of the same Service. The commander or individual has the authority to require consultation between the agencies involved, but does not have the authority to compel agreement. In the event that essential agreement cannot be reached, the matter shall be referred to the appointing authority.

COP Committee of Principals.

COR Contracting Officer's Representative. See Contracting Officer.

CORBA Common Object Request Broker Architecture.

CORM Commission on Roles and Missions.

Corner Reflector 1. A de

1. A device, normally consisting of three metallic surfaces or screens perpendicular to one another, designed to act as a radar target or marker. 2. In radar interpretation, an object that, by means of multiple reflections from smooth surfaces, produces a radar return of greater magnitude than might be expected from the physical size of the object.

Corps SAM OBSOLETE. See Medium Extended Air Defense System (MEADS).

Correlation

1. The process of relating observations or tracks from one set of data to observations or tracks from another set of data, i.e., collecting data from different frames or sensors that presumably relate to the same target. 2. In air defense, the determination that an aircraft appearing on a radarscope, on a plotting board, or visual is the same as that on which information is being received form another source. 3. In intelligence usage, the process which associates and combines data on a single entity or subject from independent observations, in order to improve the reliability or credibility or the information.

COSEMS

Evolving architecture operations support tool.

COSM

Computer System Operator's Manual.

COSMIC

NATO security category.

Cost Analysis Improvement Group (CAIG) An organization within the office of OSD Director, PA&E which advises the DAB on all matters concerning the estimation, review, and presentation of cost analysis of future weapon systems. The CAIG also develops common cost estimating procedures for DoD.

Cost Analysis Requirements Document (CARD) The document describing the technical baseline which is a subset of current system technical data and is used to generate the baseline cost estimate for an SDS element. It includes, but is not limited to, the element description, interfaces, operational concept quantity requirements, manpower requirements, activity rates, schedules, research and development phasing plan, and facilities requirements.

Cost and Operational Effectiveness Analysis (COEA) OBSOLETE. An analysis of the estimated costs and operational effectiveness of alternative material systems to meet a mission need, and the associated program for acquiring each alternative. (Replaced by Analysis of Alternatives (AOA).

Cost Risk

Cost estimating risk and schedule/technical risk. Cost estimating risk is the risk due to cost estimating errors and the statistical uncertainty in the estimate. Schedule/technical risk is risk due to inability to conquer the problems posed by the intended design.

COTR

Contracting Officer's Technical Representative. See Contracting Officer.

COTS

Commercial Off-The-Shelf.

Countercountermeasures (CCM) Measures taken by the defense to defeat offensive countermeasures.

Counterair

A US Air Force term for air operations conducted to attain and maintain a desired degree of air superiority by the destruction or neutralization or enemy forces. Both air offensive and air defensive actions are involved. The former range throughout enemy territory and are generally conducted a the initiative of friendly forces. The latter are conducted near or over friendly territory and are generally reactive to the initiative of the enemy air forces.

Counterforce

The employment of strategic air and missile forces in an effort to destroy, or render impotent, selected military capabilities of an enemy force under any of the circumstances by which hostilities may be initiated.

Countermeasure

A design or procedural measure taken against covert or overt attacks.

Countermeasures (CM)

That form of military science that by the employment of devices and/or techniques, has as its objective the impairment of the operational effectiveness of enemy activity.

Countermeasures Rejection (Surveillance) Improvement or rejection of an object signal in the presence of countermeasures.

Course of Action (COA)

1. Any sequence of acts that an individual or unit may follow. 2. A possible plan open to an individual or command that would accomplish or is related to the accomplishment of his mission. 3. The scheme adopted to accomplish a job or mission. 4. A line of conduct in an engagement. 5. A plan to accomplish a mission. It describes the execution concept for BMD of North America. It will specify the engagement priorities, resource allocation and desired results by Area of Operation (AO). (USSPACECOM) 6. The scheme adopted to accomplish a task or mission. It is a product of the Joint Operation Planning and Execution System concept development phase. The supported commander will include a recommended course of action in the commander's estimate. The recommended course of action will include the concept of operations, evaluation of supportability estimates of supporting organizations, and an integrated time-phased data base of combat, combat support, and combat service support forces and sustainment. Refinement of this data base will be contingent on the time available for course of action development. When approved, the course of action becomes the basis for the development of an operation plan or operation order.

Coverage

1. The ground area represented on imagery, photomaps, mosaics, maps, and other geographical presentation systems. 2. Cover or protection, as the coverage of troops by supporting fire. 3. The extent to which intelligence information is available in respect to any specified area of interest. 4. The summation of the geographical areas and volumes of aerospace under surveillance.

Covert Timing Channel

A covert channel in which one process signals information to another by modulating its own use of system resources in such a way that this manipulation affects the real response time observed by the second process.

CP Command Post.

CPA 1. Chairman's Program Assessment. 2. Closest Point of Approach.

CPAF Cost Plus Award Fee.

CPAM Chief of Naval Operations Program Assessment Memorandum (Navy)

CPAR Cost Performance Assessment Report.

CPAT Critical Process Assessment Tool (AFMC term).

CPB Charged Particle Beam.

CPEV Communications/Processor [Network] Experimental Version.

CPFF Cost Plus Fixed Fee.

CPIF Cost Plus Incentive Fee.

CPIPT Cost-Performance Integrated Product (Process) Team.

CPM 1. Critical Path Method. 2. Contractor Performance Measurement.

CPP Critical Performance Parameter.

CPR Cost Performance Report.

CPR/NC Cost Performance Report/No Criteria (Contract management term).

CPS 1. Consolidated Program Summary. 2. Competitive Prototyping Strategy.

3. Current Program Status. 4. Characters Per Second.

CPU Central Processing Unit (TelComm/Computer term).

CPX See Command Post Exercise.

CQAE Chief/Contract Quality Assurance Evaluator.

CR 1. Computer Resources. 2. Continuing Resolution (US Congress term).

CR-UAV Close Range Unmanned Aerial Vehicle.

CRA 1. Coordinating Review Authority. 2. Command Relationships Agreement.

CRADA Cooperative Research and Development Agreement.

CRAM 1. Control Random Access Memory.

2. Cross-tie Random Access Memory (Computer term)

CRB Configuration Review Board.

CRC 1. Control and Reporting Center. 2. Command Report Center. 3. Circuit Routing Chart. 4.

CONUS Replacement Center. 5. Combined Reporting Center.

CRD 1. Capstone Requirements Document. 2. Component Requirements Document.

CRDA Cooperative Research and Development Agreement.

CRG 1. Communications Relay Group(s) (PATRIOT).

2. Compliance Review Group (ABM Treaty term).

CRI Classification, Recognition and Identification.

CRISD Computer Resources Integrated Support Document.

Critical Specific facts about friendly intentions, capabilities, and activities vitally needed by Information

adversaries for them to plan and act effectively so as to guarantee failure or

unacceptable consequences for friendly mission accomplishment.

Critical A threat capability or threshold established by the program, changes to which could Intelligence critically impact on the effectiveness and survivability of the proposed system. **Parameter**

A key operational effectiveness or operational suitability issue that must be examined Critical **Operational Issue** in operational test and evaluation to determine the system's capability to perform its

mission. A critical operational issue is normally phrased as a question to be answered

in evaluating a system's operational effectiveness and/or operational suitability.

Critical Supporting Technology A technology that program management personnel consider a critical part of the program

being described.

Critical Design Review (CDR) A review conducted to determine that the detailed design satisfies the performance and engineering requirements of the development specification; to establish the detailed design compatibility among the item and other items of equipment, facilities, computer programs, and personnel; to assess producibility and risk areas; and to review the preliminary product specifications. Conducted during Phase I, Demonstration and Validation (for prototypes) and Phase II, Engineering and Manufacturing Development.

Critical Issues

Those aspects of a system's capability, either operational, technical, or other, that must be questioned before a system's overall suitability can be known, and which are of primary importance to the decision authority in reaching a decision to allow the system to advance into the next phase of design, development, production, or post-production.

Critical Path Method A technique that aids dependency of other activities and the time required to complete them. Activities, which when delayed have an impact on the total project schedule, are critical and are said to be on the critical path.

Critical Risk

The existence of a vulnerability that could cause exceptionally grave damage to the viability or the operational effectiveness of the SDS.

Critical Security Risk The existence of a security vulnerability that, if exploited by an adversary, could cause exceptionally grave damage to the viability of the BMD or the operational effectiveness of the SDS. Critical risks assume an adversary's capability to cause major system disruption or degradation (e.g., single point failure), destruction of mission-critical components, or usurpation of system functions.

CRLCMP Computer Resources Life-Cycle Management Plan.

CRM Computer Resources Management.

CRMP Computer Resources Management Plan.

CRO Chemical Release Observation.

CRP 1. Command and Reporting Post. 2. Control and Reporting Point (JFACC term).

CRS 1. Computer Resources Support. 2. Congressional Research Service.

3. Contractor Reporting System.

CRT Cathode Ray Tube.

CRWG Computer Resource Working Group.

Cryocoolers Cryogenic Coolers.

Cryogenic Of or related to cryogens (substances which are used to obtain low temperatures).

Crypto A designation or marking which identifies classified operational keying material, and

which indicates that this material requires special consideration with respect to access,

storage and handling.

Cryptographic System

The documents, devices, equipment, and associated techniques that are used as a unit to provide a single means of encryption (enciphering or encoding).

Cryptology The science that deals with hidden, disguised, or encrypted communications. It includes

communications security and communications intelligence.

CS 1. OBSOLETE. See Corps SAM. 2. Contracting Specialist. 3. Contract Start.

CS/CSS Combat Support and Combat Service Support (USAF budget term).

CSA 1. Chief of Staff of the Army. 2. Cognizant Security Agency.

3. Configuration Status Accounting.

CSAF Chief of Staff of the Air Force.

CSC Computer Software Component.

CSCE OBSOLETE - Conference on Security and Cooperation in Europe. (see OSCE)

CSCSC Cost/Schedule Control System Criteria.

CSD 1. Constant Speed Drive. 2. Critical System Demonstration.

CSE Center for Security Evaluations (DCI).

CSEDS Combat System Engineering Development Site, supporting the AEGIS Weapon System,

located in Cherry Hill, NJ.

CSF Consolidated Support Facility, Arlington, VA.

CSI 1. Critical Safety Item. 2. Critical Sustainability Item.

CSIP Current Systems Improvement Program.

CSIZE See Constellation Size.

CSL Computer Systems Laboratory.

CSM 1. Core Support Module (C2E term). 2. Communications Support Model.

CSNI Communications Shared Network Interface (NATO term).

CSO 1. See Closely-Spaced Object. 2. Cognizant Security Office.

CSOC See Consolidated Space Operations Center.

CSOM Computer System Operator's Manual.

CSOSS Combat System Operational System Sequencing.

CSP Communications Support Processor (numerous locations, including USAF Air

Development Center, Rome, NY term).

CSRD Computer System Requirements Document.

CSS 1. Cooperating Space System. 2. See Communications System Segment.

3. Contractor Support Services. 4. Common Sharing System.

5. Communications Support System (Navy term). 6. Common Support System.

7. Combat Service Support.

CSSCS Combat Service Support Control System (USA term).

CSSLAB Computer System Security and Privacy Advisory Board.

CSSO Computer Systems Security Officer.

CSSTSS Combat Service Support Training Simulation System (USA term).

CSTC 1. See Consolidated Space Test Center.

2. Computer Security Technology Center.

CSTI Civil Space Technology Initiative.

CSU 1. Computer Software Unit. 2. Communications System Utilization.

CSUR Communications System Utilization Report.

CT 1. Counterterrorism. 2. Communications Terminal. 3. Control Telemetry.

4. Cryptologic Technician (USN term).

CTACS Contingency Theater Air Control System (JFACC term).

CTAPS Contingency Theater Automated Planning System (USAF).

CTB 1. Communications Test Bed. 2. Comprehensive Test Ban [Treaty term].

CTBM Conventionally-armed TBM.

CTC Combat Training Center (USA, Ft. Levenworth, KS).

CTCC Critical Technology Coordinating Committee.

CTD Communications Test Driver.

CTE 1. Center for Test and Evaluation (JIEO term) 2. Common Test Environment.

CTEIP Central Test and Evaluation Investment Program. A DoD program for centrally funding

selected test investments proposed by the Services and Defense Agencies (including

BMDO).

CTF 1. Controlled Test Flights. 2. Coalition Task Force (OJCS term).

CTI Concept Technology Insertion.

CTN CALS Test Network.

CTOC Corps Tactical Operations Center.

CTOL Conventional Takeoff/Landing aircraft.

CTP 1. Critical Technical Parameters. 2. Communication Tasking Plan.

3. Consolidated Targets Program.

CTPE Central Tactical Processing Element.

CTPP 1. Consolidated Targets Program Plan.

2. Central Tactical Processing Program (USAF/SMC Theater air defense capability

program).

CTR Cooperative Threat Reduction (Treaty negotiation term).

CTRS Centers.

CTS 1. Clear To Send (TelComm/Computer term).

2. Contact Test Set (USA IFTE term).

CTSS Computer and Telecommunications Staff.

CTT Commander's Tactical Terminal (US Army).

CTT-H/R Commander's Tactical Terminal -- Hybrid Receiver (USA term).

CTV Control Test Vehicle(s).

CUDIXS Common User Digital Information Exchange System.

Cued Operation The directing of one sensor based upon the data received from another sensor.

Cueing Command The command within a tactic which specifies the sensor element's coverage volume.

Cueing Data Cueing data is a subset of object tracks within a sensor element's coverage volume.

CUI Common User Interface.

CV 1. See Carrier Vehicle. 2. U.S. Navy Aircraft Carrier. 3. Curriculum Vitae.

CV/BM Carrier Vehicle/ Battle Management.

CVBG USN aircraft carrier battle group.

CVHG Carrier, Aircraft (V/STOL), Guided missile.

CVISC Combat Visual Information Support Center.

CVL Copper Vapor Lasers.

CVN USN nuclear powered aircraft carrier.

CW 1. Continuous Wave. 2. Chemical Weapon/Warfare. 3. Carrier Wave.

CWAR Continuous Wave Acquisition Cycle (Hawk).

CWBS Contract Work Breakdown Structure.

CWDD Continuous Wave Deuterium Demonstrator.

CWIPT Cost Working group Integrated Product Team.

CY Calendar Year.

D Deuterium.

D Spec Process specification.

D Star Measure of infrared sensor sensitivity.

D&D Design and Development.

D&T Detection and Tracking.

D-IFOG Depolarized-Interferometric Fiber Optic Gyro.

D-Level Depot Level (ILS term).

D/A Digital-to-Analog.

D/V See Demonstration and Validation.

D2 Projectile (interceptor) in the Hyper-Velocity Gun program.

DA 1. Department of the Army. 2. Department of Administration.

3. Decision Analysis. 4. Developing Agency/Activity. 5. Data Administrator. 6. Direct

Action. 7. Data Adapter.

DAA Designated Approval Authority (DD 5000 term).

DAASAT Direct Ascent Anti-Satellite.

DAB See Defense Acquisition Board.

DAC 1. Days After Contract [Award]. 2. Department of the Army Civilian.

3. Directed Attack Characterization. 4. Deploy ACCS Component.

5. Digital-to-Analog Converter.

DACS Divert and Attitude Control System.

DAD Defense Acquisition Deskbook.

DADS 1. Distributed Air Defense Study (1993). 2. Digital Automated Data System.

3. Distributed Analysis for Decision Support System.

4. Distributed Ada Development System.

DAE See Defense Acquisition Executive.

DAES Defense Acquisition Executive Summary.

DAGGR Depressed Altitude Guided Gun Round.

DAHQ Department of the Army Headquarters.

DAI Damage Assessment Indicator (targets).

DAL 1. See Defended Asset List. 2. Data Accession List.

DAMA Demand Assigned Multiple Access.

DANASAT Direct Ascent Nuclear Anti-Satellite.

DAPR Director's Annual Program Review (SDIO term)

DARO Defense Aeronautical Reconnaissance Office (OSD).

DARP Defense Aeronautical Reconnaissance Program

DARPA Defense Advanced Research Projects Agency. See also ARPA.

DART 1. OBSOLETE. Defense Acquisition Review Team.

2. Data Analysis and Review Team.

DASA German Aerospace. Member of the MEADS Program Team.

DASC Deep Air Support Center (JFACC term).

DASD 1. Deputy Assistant Secretary of Defense.

2. Direct Access Storage Device (Computer term).

DASD(C3) Deputy /Assistant Secretary of Defense (C3).

DASO Demonstration and Shakedown Operation.

Data Integrity The state that exists when computerized data is the same as that in the source

documents and has not been exposed to accidental or malicious alteration or destruction.

Datalink 1. The means of connecting one location to another for the purpose of transmitting and

receiving data. 2. A particular path between two nodes over which data is transmitted. It includes not only the transmission medium, but digital to analog converters, modems, transmission equipment, antennas, etc., associated with this path. In the SDS backbone network, it was a path between two SDS elements. In space these datalinks were microwave or laser. On the ground, they could have been wireline, microwave, or

optical fiber.

DAU Defense Acquisition University.

DAVID Development of Advanced Very long wavelength Infrared Detector (USAF Phillips Lab

term).

DAWS Defense Automated Warning System.

Dazzling The temporary blinding of a sensor by overloading it with an intense signal of

electromagnetic radiation (e.g., from a laser or a nuclear explosion).

DB Data Base.

DBME Database Management Environment (Computer term).

DBMS Database Management System.

DBOF Defense Business Operations Fund.

DBS Direct Broadcast Satellite.

Dbsm Decibels per square meter.

DBSM Database System Management.

DC 1. Disarmament Commission. 2. Direct Current.

DC-X Delta Clipper Experiment.

DCA 1. Defensive Counter Air. 2. OBSOLETE. Defense Communications Agency. (Now

known as Defense Information Systems Agency (DISA)).

DCAA Defense Contract Audit Agency.

DCAS Defense Contract Administrative Services.

DCCO Defense Commercial Communications Office (of DISA).

DCDS Distributed Computer Design/Development System.

DCE 1. Data Communications Equipment (TelComm/Computer term).

2. Distributed Computer Environment.

DCEC Defense Communications Electronics Command.

DCI 1. Director of Central Intelligence. 2. Dual Channel Interchange.

3. Document Change Instruction.

DCINC Deputy Commander-in-Chief.

DCM See Defensive Counter Measures.

DCMC Defense Contract Management Command.

DCN Document Change Notice.

DCO Director of Combat Operations (JFACC term).

DCP 1. Decision Coordination Paper (See ADM).

2. Director of Combat Plans (JFACC term)

DCPG Digital Clock Pulse Generator.

DCS 1. Deputy Chief of Staff. 2. Defense Communications System.

3. Defense Courier Service.

DCSOPS Deputy Chief of Staff for Operations and Plans (Army).

DCT Digital Communications Terminal.

DCTN Defense Commercial Telecommunications Network.

DD 1. Variation of DoD.

DDCI Deputy Director of Central Intelligence.

DDEL Dwight David Eisenhower Library, Abilene, KN (Army term).

DDG USN guided missile destroyer.

DDL Disclosure authority letter.

DDN Defense Data Network.

DDR&E Director, Defense Research and Engineering.

DDS Dataphone Digital Service (AT&T Comms service) (TelComm/ Computer term).

DE 1. See Directed Energy. 2. Delay Equalizer.

DEBRA Debris, Radiance Model.

Decentralized Control In air defense, the normal mode whereby a higher echelon monitors unit actions, making direct target assignments to units only when necessary to ensure proper fire distribution or to prevent engagement of friendly aircraft.

Decentralized Execution The distributed and integrated implementation of USCINCSPACE direction by the BMD

forces. (AFSPACECOM)

Decommissioning The removal or the rendering useless of obsolete or no longer needed components of the

BMD system from service.

Decrement A directed funding level reduction for an acquisition program.

DED Data Element Definition (Computer term).

Dedicated Mode of Operation (ADP Security) A mode of operation where all users of the AIS possess the required personnel security clearance or authorization, formal access approval (if required), and a Need-to-Know for

all data included in the AIS.

Deep Space (DS) The region of outer space at altitudes greater than 3,000 nautical miles (about 5,600

kilometers) above the earth's surface.

Def Definition.

DEF 1. Defense. 2. Demilitarization Enterprise Fund.

DEFCON See Defense Readiness Conditions.

Defended Asset List (DAL) A ranked listing of facilities, forces, and national political items that require protection from attack or hostile surveillance. The list is compiled from Federal departments and agencies, Unified and Specified Commands, and the Armed Services to ensure National

Security Emergency Preparedness functions.

Defense Readiness Conditions (DEFCON) A uniform system of progressive alert postures for use between the Chairman of the Joint Chiefs of Staff and the commanders of unified and specified commands and for use by the Services. Defense readiness conditions are graduated to match situations of varying military severity (status of alert). Defense Readiness Conditions are identified by the

short title DEFCON (5), (4), (3), (2), and (1), as appropriate.

Defense Acquisition Board (DAB)

The senior DoD acquisition review board chaired by the Under Secretary of Defense for Acquisition & Technology. The Vice Chairman of the Joint Chiefs of Staff is the Vice-Chair. Other members of the Board are the Deputy Under Secretary of Defense for Acquisition and Technology, Service Acquisition Executives of the Army, Navy, and Air Force; the Director of Defense Research and Engineering; the Assistant Secretary of Defense for Program Analysis and Evaluation; the Comptroller of the Department of Defense; the Director of Operational Test and Evaluation; the appropriate Defense Acquisition Board Committee Chair; and the Defense Acquisition Board Executive Secretary. Other persons may attend at the invitation of the Chair. (See DoD Directive 5000.49, "Defense Acquisition Board.")

Defense Acquisition Board Committee

Advisory review groups subordinate to the Defense Acquisition Board. The number of Committees is determined by the Under Secretary of Defense for Acquisition. The purpose of the Committee is to review DoD Component programs prior to a Defense Acquisition Board review in order to make an independent assessment and recommendation to the Board regarding the program. (See DoD Directive 5000.49, "Defense Acquisition Board.")

Defense Acquisition Executive (DAE) The principal advisor to the Secretary of Defense on all matters pertaining to the Department of Defense Acquisition System. The USD(A&T) is the DAE and the Defense Procurement Executive (DoD Directive 5134.1).

Defense Acquisition Executive Summary (DAES) The DAE's principal mechanism for tracking programs between milestone reviews. Includes programs subject to the Selected Acquisition Report (SAR), and any non-SAR programs subject to review by the Defense Acquisition Board.

Defense Employment Option (DEO) Engagement strategy provided to USSPACECOM component forces to achieve specific military objectives against a ballistic missile attack. It defines hostile target priorities, provides assets to defend, and allocates SDS resources to be employed. A number of DEOs may reside in a particular Preplanned Response Option (PRO). However, default DEOs (those believed to be best suited to counter the threat initially) will be automatically processed and executed when Defense Activation Authority (DAA) is given by USCINCSPACE.

Defense Enterprise Program (DEP) An Acquisition program designed to streamline the acquisition process by waiver of selected regulatory requirements.

Defense In-Depth

Locating mutually supportive defense positions in such a manner as to absorb and progressively weaken an attack, prevent initial observations of the entire position by the enemy, and allow the commander to maneuver his reserve.

Defense Meteorological Satellite Program (DMSP) Satellites designed to meet unique military requirements for weather information. Used to detect and observe developing cloud patterns and follow existing weather systems. Visible and infrared imagery are used to form three-dimensional cloud-plural analyses of various weather conditions.

Defense Planning and Resources Board (DPRB) A board, chaired by the Deputy Secretary of Defense, established to facilitate decision making during all phases of the planning, programming, and budgeting system process. Board members include the Secretaries of the Military Departments, the Chairman of the Joint Chiefs of Staff, the Under Secretaries of Defense for Acquisition and Technology, and Policy, the Assistant Secretary of Defense for Program Analysis and Evaluation, and the Comptroller of the Department of Defense.

Defense Planning Guidance (DPG) Document issued by SECDEF to DoD components providing strategic framework for developing the Service POMs. Result of planning effort by Joint Staff, OSD, and Services. Until 1986, issued annually in January. In connection with two-year budget process, is issued every other (even) year.

Defense Priority and Allocation System (DPAS) The implementation of a statutory requirement where contracts in support of national defense must be accepted and performed on a priority basis over all other contracts, and which requires the allocation of materials and facilities in such a manner as to promote the national defense. See "DO" and "DX."

Defense Satellite (DSAT) Weapon Defense Satellite Communications Systems (DSCS) A device that is intended to defend satellites by destroying attacking ASAT weapons.

Advanced communications satellites in synchronous orbit around the earth. Provides high-capacity, super high-frequency (SHF) secure voice and data links for the Worldwide Military Command and Control System (WWMCCS). They support terminal deployments for contingencies; restoration of disrupted service overseas; presidential travel; global connectivity for the Diplomatic Telecommunications Services; and transmission to the continental United States of some surveillance, intelligence, and early warning data.

Defense Support Program (DSP) A system of satellites in geostationary orbits, fixed and mobile ground processing stations, one multi-purpose facility, and a ground communications network (GCN). DSP's primary mission is to provide tactical warning and limited attack assessment of a ballistic missile attack.

Defense Suppression

Temporary or transient degradation of the performance of a defensive system below the level needed to fulfill its mission objectives, by an opposing force. (USSPACECOM)

Defense Tier

The arranging of a defensive system to correlate with the phases of a ballistic missile trajectory; i.e., boost, post-boost, midcourse, and terminal.

Defensive Counter Measures (DCM) Actions taken to eliminate an ASAT attack.

Defensive Technologies Study Team (DTST) A committee, generally known as the "Fletcher Panel" after its Chairman, appointed by (former) President Reagan to investigate the technologies of potential BMD systems.

DEFSMAC

Defense Special Missiles and Astronautics Center, Ft. Meade, MD.

DEIS

Defense Enterprise Integration Services (ex-DTIS).

DEL

Delivery.

Delivery Error

The inaccuracy associated with a given weapon system resulting in a dispersion of shots about the aiming point. See also Circular Error Probable.

Delta-V

A numerical index of the maneuverability of a satellite or rocket. It is the maximum change in velocity which a spacecraft could achieve in the absence of a gravitational field.

Dem/Val

OBSOLETE. Demonstration and Validation (DD 5000 term).

Demise Altitude

Altitude at which object of interest (decoy, chaff, etc.) no longer performs its desired function (matching RV characteristics, screening RV, etc.)

DEMO

Demonstration.

Demonstration and Validation (Dem/Val)

OBSOLETE. The acquisition phase when major program characteristics and product designs are refined through extensive study and analysis, hardware development, test, and evaluations. The objective is to validate the choice of alternatives and to provide the basis for determining whether or not to proceed into Engineering and Manufacturing Development (EMD).

Denial Measure

An action to hinder or deny the enemy the use of space, personnel, or facilities. It may include destruction, removal, contamination, or erection of obstructions.

DEO

See Defense Employment Option.

Department of Defense Acquisition System A single uniform system whereby all equipment, facilities, and services are planned, designed, developed, acquired, maintained, and disposed of within the Department of Defense. The system encompasses establishing and enforcing policies and practices that govern acquisitions, to include documenting mission needs and establishing performance goals and baselines; determining and prioritizing resource requirements for acquisition programs; planning and executing acquisition programs; directing and controlling the acquisition review process; developing and assessing logistics implications; contracting; monitoring the execution status of approved programs; and reporting to Congress. (See DoD Directive 5134.1, "Under Secretary of Defense (Acquisition).")

Deployment

1. The placement of force elements in battle positions to obtain a higher state of readiness. 2. The movement required to place force elements in battle positions. 3. Fielding the weapons system by placing it into operational use with units in the field/fleet. 4. To arrange, place, or move strategically.

Deployment Planning

1. The development and maintenance of plans required to initially deploy, maintain, and evolve the operational system in accordance with schedules and priorities. It includes factors such as launch facility availability and planning for the availability of other required elements such as trained personnel or units. In addition, it identifies the impact of deployment on operational readiness and any testing constraints associated with deployment. 2. Encompasses all activities from origin or home station through destination, specifically including intra-continental United States, intertheater, and intratheater movement legs, staging areas, and holding areas.

Deployment Testing The testing and/or simulation of system assets in the physical and operational environment in which they are expected to perform.

DepOpsDep

Service Deputy Operations Deputies.

Depressed Trajectory

Trajectory with an apogee below that of the minimum-energy trajectory.

DEPSCoR

Defense Experimental Program to Stimulate Competitive Research.

DEPSECDEF

Deputy Secretary of Defense

DepSecState

Deputy Secretary of State.

DERA

Defence Evaluation and Research Agency. Consolidated research and development resources of the U.K. Ministry of Defence. Headquartered in Farnborough, England.

Derivative Classification A determination that information is in substance the same as information currently classified and the application of the same classification marking.

DES 1. Data Encryption Standard. 2. Digital Encryption Standard.

DESC Defense Electronics Supply Center (DLA term).

Design Constraints Boundary conditions within which the developer must remain while allocating

performance requirements and/or synthesizing system elements.

Design Parameters Qualitative, quantitative, physical, and functional value characteristics that are inputs to

the design process, for use in design tradeoffs, risk analyses, and development of a

system that is responsive to system requirements.

Design Phase A period of time in the software life cycle during which the designs for architecture,

software components, interfaces, and data are created, documented, and verified to

satisfy requirements.

Design-to-Cost (DTC) Goal

Management concept wherein rigorous cost goals are established during development, and the control of systems costs (acquisition, operating, and support) to these goals is achieved by practical tradeoffs between operational capability, performance, costs, and schedule. Cost, as a key design parameter, is addressed on a continuing basis and as an inherent part of the development and production process. A DTC goal should be in the form of average unit flyaway cost. Also, DTC parameters for operation and support will be selected--parameters that are design-controllable, significantly affect O&S costs, and can be measured during test and evaluation. Parameters may be expressed in dollars or by other measurable factors, e.g., manpower, reliability, or maintainability. Firm goals and thresholds will be established no later than entry into EMD (Milestone II). This is an in-house goal, almost contractual in nature, between the PM (Service) and the SECDEF. Allocations from this goal will become the contractual DTC goals for contractors supporting the program.

Det Detachment.

DETEC Defense Technology Evaluation Code.

Detector A passive IR, visible, UV detector turns photons into an electrical signal. The IFOV of

the detector is its solid angular subtense. There is sometimes confusion between the detector subtense (size) and the pixel (picture element size). They are the same for a staring sensor, but in a scanner it depends on the array offset and number of samples per dwell. A pixel area is often only one-sixth or one-eighth of a detector angular area.

DEV ENV Development Environment.

Development Test Test conducted by

(DT)

Test conducted by the development test organization to achieve specified test objectives. It may be a complete test, a subtest, or a phase of a test.

objectives. It may be a complete test, a subtest, of a phase of a test.

Development Test and Evaluation (DT&E) Test and evaluation conducted to measure progress, usually of component/subsystems, and the proofing of manufacturing processes and controls and to assist the engineering design and development process and verify attainment of technical performance specifications and objectives. Usually conducted under controlled or laboratory conditions. Can be conducted before or after production begins.

Development Test I (DT I)

A series of tests conducted during the demonstration and validation phase. Components, subsystems, or the total (or full) system are examined to determine whether the system

is ready for EMD. State-of-the-art technology is addressed in DT I.

Development Test II (DT II)

A series of tests, normally during EMD, which provide the technical data necessary to assess whether the system is ready for low-rate initial or full production. It measures the technical performance and safety characteristics of the item and evaluates its associated tools, test equipment, training package, and maintenance test package as described in the development plan. DT II addresses accomplishment of engineering design goals and the fulfillment of contract specifications.

Development Test III (DT III) Tests conducted during production.

Deviation Criteria

Limits established beyond which a Program Manager may not trade-off cost, schedule, or performance without authorization from the milestone decision authority. Acquisition Program Baseline (APB) thresholds represent these parameters.

Devolution of Command

Minimal essential operational capability to perform C2 provided in an orderly and timely fashion to a duly authorized successor.

DEW 1. See Directed Energy Weapon. 2. Directed Energy Warfare.

DEW/D Directed Energy Weapon/Discrimination.

DEWG,O Directed Energy Weapon Ground, Orbital

DEWL Directed Energy Weapon, Laser (thermal or impulse).

DEWP Directed Energy Weapon, Particle Beam (neutral or charged).

DF-KBS Data Fusion Knowledge Based System.

DF₂ Deuterium Fluoride.

DFAR Defense Federal Acquisition Regulation.

DFARS Defense Federal Acquisition Regulation Supplement.

DFAS Defense Financing and Accounting Service.

DG OBSOLETE. Defense Guidance. See Defense Planning Guidance.

DGA Director General of Armaments (France).

DGP Defense Group on Proliferation.

DI 1. Data Item. 2. Developmental Item.

DIA Defense Intelligence Agency.

DIAC Defense Intelligence Analysis Center.

DIAM Defense Intelligence Agency Manual.

Diameter (Optics) The unit of measure of the light gathering power of a lens.

DICE Digital Integrated Combat Evaluator.

DID Data Item Description.

Diffraction The spreading out of electromagnetic radiation as it leaves an aperture. The angle of

spread, which cannot be eliminated by focusing, is proportional to the ratio of the

wavelength of radiation to the diameter of the aperture.

Digital Processing The most familiar type of computing, in which problems are solved through the

mathematical manipulation of streams of bits.

DII Defense Information Infrastructure.

DIOD Direct In-Dial Out-Dial.

Dip A period of significantly decreased RCS signatures of an RV at low altitude (6 to 12

km) between wake termination and desheathing.

DIPS Dynamic Isotope Power System (which provides up to 10 kW of power).

DIR Director.

Direct Air Support

Center

A subordinate operational component of a tactical air control system designed for control and direction of close air support and other tactical air support operations, and

normally collocated with fire support coordination elements.

Direct Cost Any cost that is specifically identified with a particular final cost objective. Is not

necessarily limited to items that are incorporated into the end product as labor or

material.

Direct Labor Labor specifically identified with a particular final cost objective. Manufacturing direct

labor includes fabrication, assembly, inspection and test for constructing the end product. Engineering direct labor consists of engineering labor such as reliability,

quality assurance, test, design, etc., that is readily identified with the end product.

Directed Energy

(DE)

1. Energy in the form of atomic particles, pellets, or focused electromagnetic beams that

can be sent long distances at, or nearly at, the speed of light.

2. An umbrella term covering technologies that relate to the production of a beam of

concentrated electromagnetic energy or atomic or subatomic particles.

Directed Energy

Device

A system using directed energy primarily for a purpose other than as a weapon. Directed energy devices may produce effects that could allow the device to be used as a weapon

against certain threats, for example, laser rangefinders.

Directed Energy Weapon (DEW) A system using directed energy primarily as a direct means to damage or destroy enemy

equipment, facilities, and personnel.

DIRLAUTH Direct Liaison Authorized.

DIRNSA Director, National Security Agency.

DIS 1. Distributed Interactive Simulation. 2. Defense Investigative Service.

DISA Defense Information Systems Agency, Washington, DC. (Formerly known as Defense

Communications Agency).

DISCO Defense Industrial Security Clearance Office.

DISCOM Division Support Command (USA term).

Discretionary Judgment The authority given USCINCSPACE or his duly authorized representative to perform

actions not covered by the ROE.

DISCRIM Discrimination.

DISN Defense Information System Network (DISA term).

DISSP Defense-wide Information Systems Security Program.

DISUM Daily Intelligence Summary (JFACC term).

DITDS Defense Intelligence Threat Data System.

DITP Discriminating Interceptor Technology Program. The objective of DITP is the

development of advanced interceptor seekers to counter advanced threats. DITP will integrate passive and active sensors into an interceptor seeker which integrates data fusion processors, multicolor infrared sensors, and LADAR. DITP flight demonstrations will involve the tracking and interceptor on-board discrimination of targets of opportunity

while providing fusion processor data telemetry. (See also ASTP).

DIVARTY Division Artillery (USA term).

DIW Defensive Information Warfare.

DLA Defense Logistics Agency, Alexandria, VA.

DLSC Defense Logistics Services Center (Battle Creek, MI).

DM Data Management.

DMA OBSOLETE. Defense Mapping Agency, Fairfax, VA. See NIMA

DME Distributed Management Environment.

DMI Dual-Mode Interceptor.

DMRD Defense Management Review Decision.

DMS 1. Defense Message System. 2. Dissimilar Mission Simulator.

DMSO Defense Modeling and Simulation Office (OSD).

DMSP See Defense Meteorological Satellite Program.

DMU Disk Memory Unit.

DNA OBSOLETE. Defense Nuclear Agency, Alexandria, VA. See DSWA.

DNMS Distributed Network Management System.

DNSIX DoDIIS Network Security Information Exchange.

DNSO Defense Network Systems Organization.

DO 1. The lowest rating under the DPAS. All "DO" orders take preference over unrated

orders to meet a required delivery date.

2. Deputy for Operations (JFACC term). 3. Delivery Order.

Doc Document.

DOCPREP Documentation Preparation.

Doctrine Fundamental principles by which the military forces or elements thereof guide their

actions in support of national objectives. It is authoritative but requires judgment in the

application. See also Combined Doctrine.

DoD Department of Defense.

DoD Component Acquisition Executive A single official within a DoD Component who is responsible for all acquisition functions within that Component. This includes Service Acquisition Executives for the Military Departments and Acquisition Executives in other DoD Components who have

acquisition management responsibilities.

DoD Components The Office of the Secretary of Defense; the Military Departments; the Chairman, Joint

Chiefs of Staff and Joint Staff; the Unified and Specified Commands; the Defense

Agencies; and DoD Field Activities.

DoD Directive

5000.1

"Defense Acquisition." The principal DoD directive on acquisition. It establishes policies, practices and procedures of governing the acquisition of defense acquisition

programs.

DoD Instruction

5000.2

"Defense Acquisition Management Policies and Procedures." Implements DODD

5000.1.

DoD-M DoD Manual.

DOD-STD Department of Defense Standard.

DoDD Department of Defense Directive.

DoDI DoD Instruction.

DoDIIS DoD Intelligence Information System.

DoDISS DoD Index of Specifications and Standards.

DoDR Department of Defense Regulation.

DoE Department of Energy.

DOF Degrees of Freedom.

Dog House A large Soviet A-frame radar used as a component of the Moscow ABM system having

a detection range of approximately 3000 km. It is believed to provide battle

management for the totality of Moscow defenses.

DOP 1. Degree of Protection. 2. Depot Overhaul Point (ILS term).

DOPAA Description of Proposed Actions and Alternatives (environmental term).

Doppler Effect The phenomenon evidenced by the change in the observed frequency of a sound or radio

wave caused by a time rate of change in the effective length of the path of travel

between the source and the point of observation.

DoS Department of State (US).

DOS Disk Operating System (TelComm/Computer term).

DoT Department of Transportation [US].

DOT Designated Optical Tracker.

DOT&E Director, Operational Test and Evaluation.

DOTH Defense of the Homeland.

Down Select To reduce the number of contractors working on a program by eliminating one or more

for the next phase.

DP 1. Data Processor. 2. Decision Point. 3. Deployment Planning.

DPA 1. Defense Production Act. 2. Delegation of Procurement Authority.

DPA&E Director, Program Analysis and Evaluation.

DPAS See Defense Priority and Allocation System.

DPAT Dynamic Program Analysis Tool.

DPB Defense Policy Board.

DPG 1. See Defense Planning Guidance. 2. Dugway Proving Ground.

DPM Deputy Program Manager.

DPML Deputy Program Manager for Logistics.

DPP Distributed and Parallel Processing (Computer term).

DPR Defense Performance Review.

DPRB See Defense Planning and Resources Board.

DPRK Democratic People's Republic of Korea (North Korea).

DPRO 1. Defense Plant Representatives Office.

2. Defense Procurement Regional Office (DLA/FAR term).

DPSSL Diode-Pumped Solid State Laser.

DR Deployment Review.

DRAM Dynamic Random Access Memory.

Drawdown Curve A method used to encapsulate the overall performance of a BMD system that plots the

probability of survival on the vertical axis versus the number of attacking RVs on the horizontal axis. Used in conjunction with attack price, they are the most important

expressions of a BMD capability.

DRB Defense Resources Board.

DREN Defense Research and Engineering Network.

DRFP Draft Request for Proposal.

Drift In ballistics, a shift in projectile direction due to gyroscopic action that results from

gravitational and atmospherically induced torques on the spinning projectile.

DRM DAB Readiness Meeting (DD 5000.2 term).

Drone A land, sea, or air vehicle that is remotely or automatically controlled. See also

Remotely Piloted Vehicle.

DRP 1. Deployment Readiness Plan (USA term).

2. Deployment Readiness Program (a NMD program).

DRR Digital Receiver Replacement (USN term).

DS 1. See Deep Space. 2. Direct Support (USN term).

DS-1 Category of telecommunications circuit capability.

DS-3 LAN Category of telecommunications circuit for a Local Area Network.

DSAA Defense Security Assistance Agency (OSD).

DSAT See Defense Satellite Weapon.

DSB Defense Science Board.

DSCS See Defense Satellite Communications Systems.

DSCS-3 Defense Satellite Communications System Three.

DSCSOC Defense Satellite Communications System Ops Center.

DSI Defense Simulation Internet.

DSIS 1. Defense Special Intelligence System. 2. Defense Simulation Internet System.

DSM Decision Support Matrix.

DSMAC Digital Scene-Matching Area Correlation.

DSMC Defense Systems Management College.

DSN 1. Deep Space Network (NASA term).

2. Defense Switched Network (formerly AUTOVON),

DSP 1. Defense Support Program. 2. Defense Standardization Program.

DSPRTM Defense Support Program Real-Time Model.

DSR Data Set Ready (TelComm/Computer term).

DSRCE Down Scoped Radio Control Equipment (TelComms term).

DSS 1. Defense Supply Service. 2. Digital Signature Standard.

DST Defense Suppression Threat.

DSTAR Defense Strategic and Tactical Array Reproducibility.

DSTO Defence Science Technology Organization (Australia).

DSU Digital Service Unit (TelComm/Computer term).

DSWA Defense Special Weapons Agency, Alexandria, VA. DSWA is the successor to the

DNA.

DT 1. Discrimination Technique. 2. See Development Testing.

3. See Development Test I, II, III. 4. Down Time (ILS term).

5. Depressed Trajectory. 6. Dedicated Target.

DT&E See Development Test and Evaluation.

DT/OA Development Test/Operational Assessment.

DT/OT Developmental Test/Operational Test.

DTAP Defense Technology Area Plan.

DTC See Design-to-Cost.

DTD Digital Transfer Device (TelComm/Computer term).

DTE Data Terminal Equipment (TelComm/Computer term).

DTED Digital Terrain Elevation Data.

DTIC Defense Technical Information Center, Alexandria, VA.

DTIS Defense Technical Information Services (now DEIS).

DTLCC Design to Life-Cycle Cost.

DTLOMS Doctrine, Training, Leadership, Organization, Material, and Soldiers (USA BCBL term).

DTLS Descriptive Top-Level Specification.

DTMF Data Tone Multiple Frequency (TelComm/Computer term).

DTO Defense Technology Objectives.

DTOC Division Tactical Operations Center.

DTP 1. Detailed Test Plan. 2. Desktop Publishing.

DTR 1. Demonstration Test Round. 2. Development Test Round.

3. Data Terminal Ready (TelComm/Computer term).

DTRM Dual Thrust Rocket Motor.

DTSA Defense Technology Security Administration.

DTSE&E Director, Test Systems Engineering and Evaluation.

DTST See Defensive Technologies Study Team.

DTT Design-To Threat.

DTWT Dual Traveling Wave Tube (Electronics Engineering term).

DU Depleted Uranium.

DUA Design Upgrade Assessment.

Dual Source Two contractors producing the same components or end items for the same program.

DUNDEE Down Under Early Warning Experiment (BMDO/DSTO term).

DURIP Defense University Research Instrumentation Program.

DUSD Deputy Under Secretary of Defense.

DUSD(ES) Deputy Under Secretary of Defense (Environmental Security).

DVAL Demonstration Validation

DX The highest rating under the DPAS. It takes preference over all other rated and not rated

orders on a contractor's production line. The BMD program carries a "DX" rating.

E East.

E Spec Materiel Specification.

E-2 Designation for Hawkeye aircraft.

e-mail Electronic Mail (TelComm/Computer term).

E²I See Endo-Exoatmospheric Interceptor.

E2**SRD** Effectively Two System Requirement Document.

E³
1. Electromagnetic Environmental Effects (EEE).
2. Electrical, Electronic, and Electromechanical.

1. See Environmental Assessment. 2. Engagement Authorization.

3. Executing Agent. 4. Evolutionary Acquisition.

5. Environmental Analysis (environmental term) 6. Executive Agent.

EAC 1. Estimated Cost at Completion. 2. Early Analysis Capability.

3. Echelon Above Corps (USA term).

EAD 1. Engineering Analysis and Design. 2. Extended air defense.

3. Echelon Above Division.

EAD/D Engineering, Analysis, Design and Development.

EADSIM Extended Air Defense Simulation.

EADTB Extended Air Defense Test Bed. An object-oriented simulation tool allowing users to

model military response to airborne and ballistic missile threats.

EADTBP Extended Air Defense Test Bed Program.

EAGLE Extended Airborne Global Launch Evaluator.

EAM Emergency Action Message.

EAR Export Administration Regulations.

Early Operational Assessment An operational assessment conducted prior to, or in support of, Milestone II.

Early User Test

(EUT)

EA

A test employing representative users to examine materiel concepts, training or logistics planning, or inter-operability issues. EUT can be accomplished during DEM/VAL on brassboard configurations, experimental prototypes, or surrogates to provide data leading

to the decision to enter full-scale development.

Early Warning 1. Early detection of an enemy ballistic missile launch, usually by means of surveillance

satellites and long range radar. 2. Early notification of the launch or approach of

unknown weapons or weapon carriers.

Earth Limb The apparent outer edge of the earth as viewed from space.

Eastern Test Beginning at Patrick AFB, FL, this range stretches half-way around the globe where it

Range (ETR) meets the Western Test Range. An array of launch complexes, sensors, and tracking

sites make up the Eastern Test Range. The ETR is now operated by AFSPACECOM as

shown in WTR definition.

EB 1. Electron Beam. 2. Enhanced Blast.

EBB Electronic Bulletin Board.

EBCDIC Extended Binary Code Decimal Interchange Code.

EBW Electron Beam Welding.

EC 1. Electronic Combat. 2. Error Control. 3. OBSOLETE. European Community. Now

known as the European Union (EU).

EC/EDI Electronic Commerce/Electronic Data Interchange.

ECAC Electromagnetic Compatibility Analysis Center, Annapolis, MD.

ECB Engineering Change Board.

ECC 1. Equipment Control Center. 2. Element Control Center (USAF term).

ECCM Electronic Counter-Countermeasures.

ECDs See Element Control Directives.

ECLS ERINT Command and Launch System.

ECM 1. Electronic Countermeasures. 2. Electromagnetic Countermeasures.

3. Experiment Control and Monitor.

ECN Engineering Change Notice.

ECO 1. Engagement Control Orders. 2. Engineering Change Order.

ECP 1. See Engineering Change Proposal. 2. Emergency Command Precedence.

ECPMO Electronic Commerce Program Management Office.

ECS 1. Engagement Control Station (PATRIOT). 2. Electronics Customer Service.

3. Engineering Change Summary.

ECU Environmental Control Unit.

EDAC Error Detection and Correction.

EDGES Electronic Data/Guidelines for Element Survivability.

EDL Electrical Discharge Laser.

EDM 1. Engineering Development Model. 2. Engineering Design Model.

EDP Engineering Development Process.

EDR Embedded Data Recorder (PATRIOT).

EDS Electronic Data Systems Corporation.

EDWA Engagement Determination and Weapons Assignment (PATRIOT).

EDX Exoatmospheric Discrimination Experiment.

EE 1. Electrical Engineering. 2. Engineering Estimate.

EED Electro-Explosive Device.

EEEV End-to-End Experimental Version.

EEFI Essential Elements of Friendly Information.

EEI Essential Elements of Information.

EEIC Element of Expense Investment Code.

EELV Evolved Expendable Launch Vehicle (USAF term).

EEU Electronic Equipment Unit.

EFEX 1. Endo-Aeromechanics Flight Experiment.

2. Endo-Aerothermal Mechanics Flight Experiment .

EFF Electronic Frontier Foundation.

Effective Damage That damage necessary to render a target element inoperative, unserviceable,

nonproductive, or uninhabitable.

Effluent Plume The pathway of movement of effluents through surface water or air.

EFP Explosively Formed Projectile.

EGA Enhanced Graphic Adapter (TelComm/Computer term).

EGP End Game Processor.

EGTR Eglin [AFB] Gulf Test Range.

EHC Enhance Hit Capability (USN term, related to SM2 Block IVA).

EHF Extremely High Frequency.

ehp Equivalent Horsepower.

EIA 1. Environmental Impact Assessment. 2. See Electronic Industries Association.

EIAP Environmental Impact Analysis Process.

EIP 1. Exoatmospheric Interceptor Propulsion. 2. Embedded INFOSEC Product.

EIPC Electronic Information Privacy Center.

EIPT 1. Element IPT. 2. Engineering IPT.

EIS 1. See Environmental Impact Statement. 2. Explosive Initiation System.

EISA Extended Industry Standard Architecture (TelComm/Computer term).

EKV 1. Electromagnetic Kill Vehicle. 2. Exoatmospheric Kill Vehicle.

Elastic Range The stress range in which a material will recover its original form when the force (or loading) is removed. Elastic deformation refers to dimensional changes occurring within

the elastic range.

Electro-Optics Infrared (EO/IR)

Technologies/techniques employed by optical sensors in the wavelength spectrum slightly longer than visible but shorter than radio.

Electromagnetic A gun in which the projectile is accelerated by electromagnetic forces rather than by an Gun (EMG) explosion, as in a conventional gun.

Electromagnetic A condition when all electromagnetic emissions from electronic, electro-magnetic, and electro-optical components of a system interact without interfering with one another.

Signals transmitted as radiation through the air, through a vacuum, or through **Emanations** conductors.

An electric or magnetic field or combination of the two, as in an electromagnetic wave. Created by electric charges in motion, having both electric and magnetic components oriented at right angles to one another and containing a definite amount of energy.

Any electromagnetic disturbance that interrupts, obstructs, or otherwise degrades or limits the effective performance of electronics/electrical equipment. It can be induced intentionally, as in some forms of electronic warfare, or unintentionally, as a result of spurious emissions and responses, intermodulation products, and the like.

> The electromagnetic radiation from a nuclear explosion caused by Compton-recoil electrons and photoelectrons from photons scattered in the materials of the nuclear device or in a surrounding medium. The resulting electric and magnetic fields may couple with electrical/electronic systems to produce damaging current and voltage surges. May also be caused by non-nuclear means.

1. A form of propagated energy, arising from electric charges in motion, that produces a simultaneous wavelike variation of electric and magnetic fields in space. The highest frequencies (or shortest wavelengths) of such radiation are possessed by gamma rays, which originate from processes within atomic nuclei. As one goes to lower frequencies, the electromagnetic spectrum includes x-rays, ultraviolet light, visible light, infrared light, microwaves, and radio waves. 2. Radiation made up of oscillating electric and magnetic fields and propagated with the speed of light. Includes gamma radiation, Xrays, ultraviolet, visible, and infrared radiation, and radar and radio waves.

The range of frequencies of electromagnetic radiation from zero to infinity. It is divided into 26 alphabetically designated bands.

Application of electrical, electronic, and magnetic phenomena to develop devices used in system/subsystem design, excluding employment in the RF spectrum.

That division of electronic warfare involving actions taken to insure friendly effective use of the electromagnetic, optical, and acoustic spectra despite the enemy's use of electronic warfare to include high power microwave techniques.

Compatibility (EMC) Electromagnetic

Electromagnetic Field (EMF)

Electromagnetic Interference (EMI)

Electromagnetic Pulse (EMP)

Electromagnetic Radiation (EMR)

Electromagnetic Spectrum

Electromagnetics

Electronic Counter-**Countermeasures** (ECCM)

Electronic Industries Association (EIA)

A standards organization specializing in the electrical and functional characteristics of interface equipment.

Electronic Warfare (EW)

Any military activity involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy. The three major subdivisions are:

- Electronic attack -- Involves the use of electromagnetic or directed energy to attack personnel, facilities, or equipment with the intent of degrading, neutralizing, or destroying enemy combat capability. Also known as EA. Includes: 1) actions taken to prevent or reduce an enemy's effective use of the electromagnetic spectrum, such as jamming and electromagnetic deception, and 2) employment of weapons that use either electromagnetic or directed energy as their primary destructive mechanism (lasers, radio frequency weapons, particle beams).
- Electronic protection -- Involves actions taken to protect personnel, facilities, and equipment from any effects of friendly or enemy employment of electronic warfare that degrade, neutralize, or destroy friendly combat capability. Also called EP.
- Electronic warfare support -- Involves actions tasked by, or under direct control of, an operational commander to search for, intercept, identify, and locate sources of intentional and unintentional radiated electromagnetic energy for the purpose of immediate threat recognition. Thus, electronic warfare support provides information required for immediate decisions involving electronic warfare operations and other tactical actions such as threat avoidance, targeting, and homing. Also called ES.

Electronic Warfare (EW) Environments

Electronic warfare environments result from radar and communications jamming and other related electromagnetic countermeasures and counter-countermeasures. Currently, radar jamming is the sole EW threat for the NMD system.

Electronic Countermeasure (ECM)

That division of electronic warfare involving actions taken to prevent or reduce an enemy's effective use of the electromagnetic spectrum.

Electronics Security (ELSEC)

The protection resulting from all measures designed to deny unauthorized persons information of value that might be derived from their interception and study of noncommunications electromagnetic radiations, e.g. radar.

Electronics Intelligence (ELINT)

Technical and geolocation intelligence derived from foreign non-communications electromagnetic radiations emanating from other than nuclear detonations or radioactive sources.

Element Operations Center (EOC) An Air Force operations center which operates and maintains a BMD weapon or sensor suite. (USSPACECOM)

Element Control Directives (ECDs)

The command and control data instructions to control the conduct of the engagement. ECDs are developed by command and control software based upon variable parameter input by the operators (both pre-planned and real time), and operator defined rule sets embedded in the software. The individual battle management processors use these instructions to accomplish the assigned tasks from the operations order. ECDs are contained within a Task and represent the form of parameter values that influence that resource management processes of Weapon Target Assignment (WTA), Sensor Resource Management (SRM), and Communications Management (CM). There will be numerous ECDs per Task.

ELF

1. Extremely Low Frequency. 2. Elementary Logistics Features.

ELIAS

Earth Limb Infrared Atomic Structure.

ELINFOSEC Electronic Information Security.

ELINT See Electronics Intelligence.

ELPRS Enhanced Position Location Reporting System.

ELS Earth Limb Sensor.

ELSEC See Electronics Security.

ELSI Enhanced Longwave Spectrometer Imager.

ELV Expendable Launch Vehicle.

Emanations The protection that results from all measures designed to deny unauthorized persons information of value that might be derived from intercept and analysis of compromising

(EMSEC) emanations.

EMC 1. See Electromagnetic Compatibility. 2. Early Midcourse.

EMCON See Emission Control.

EMD See Engineering and Manufacturing Development (previously referred to as FSD).

EMDCT Expanded Memory DCT.

EME Electromagnetic Environment.

EMF See Electromagnetic Field.

EMG See Electromagnetic Gun.

EMI See Electromagnetic Interference.

EMIP See Exoatmospheric Midcourse Interceptor Program.

EmissionThe selective and controlled use of electromagnetic, acoustic, or other emitters to optimize command and control capabilities while minimizing: a) detection by enemy (EMCON) sensors, and b) mutual interference among friendly systems. EMCON can also be

involved in military deception plans. Also called EMCON.

EML Electromagnetic Launcher. A device used to launch hypervelocity particles.

EMP Electromagnetic Pulse.

EMPSKD Employment Scheduling (USN term).

EMR See Electromagnetic Radiation.

EMRLD Excimer Moderate Power Raman-Shifted Laser Device.

EMSEC See Emanations Security.

EMSP Enhanced Modular Signal Processor.

EMT Engineering Management Team.

EMV Electromagnetic Vulnerability.

ENA Engineering: Architecture and Analysis.

ENCATT Engineer CATT (USA term).

Enclave Isolated resource - an SDS asset which has lost connectivity with other SDS assets with

which it normally has connectivity, but is still capable of coordinating with SDS assets to conduct ballistic missile defense. Various combinations of connectivity losses are possible; for example, (1) an operations center has lost connectivity with Higher Authority, yet can still provide sufficient C2 and can still connect with sufficient weapons and sensors to conduct an engagement and (2) an operations center has loss of connectivity with another operations center with which it normally shares data, but can

still conduct an engagement.

End Item The final production product when assembled, or completed, and ready for

issue/deployment.

Endgame FOV The field of view of the interceptor's sensor during its final maneuvers after target

acquisition to intercept the target. May be less than the acquisition FOV.

Endo-A ground-based interceptor capable of engaging RVs either endoatmospheric or **Exoatmospheric**

exoatmospheric. (Successor to High Endoatmospheric Defense Interceptor (HEDI).)

Within the earth's atmosphere; generally considered to be altitudes below 100 km. An

endoatmospheric interceptor reaches its target within the atmosphere.

ENDOSIM Endoatmospheric Simulation.

Endurance The time an aircraft can continue flying, or a ground vehicle or ship can continue

operating, under specified conditions, e.g. without refueling.

ENG Engineering.

ENGAG'T Engagement.

Engage 1. In air defense, a fire control order used to direct or authorize units and/or weapon

systems to fire on a designated target. 2. In air intercept, a code meaning, "Attack

designated contact."

from the first defensive weapon. 2. A period beginning whenever any hostile object is identified (designated) as hostile and ending after the last hostile object has been attacked. 3. In air defense, an attack with guns or air-to-air missiles by an interceptor aircraft, or the launch of an air defense missile by air defense artillery and the missile's

1. A period of hostilities beginning when the first ballistic missile target undergoes fire

subsequent travel to intercept.

and destruction of hostile targets.

Engagement Control

Engagement

Interceptor (E²I) **Endoatmospheric**

> 1. That set of coordination, assessment, decision, and direction functions normally implemented automatically to execute the selected battle plan, military strategy and tactics within partitioned battle spaces (i.e., a spatial/functional subdivision of battle management). Includes the determination of: (1) what specific objects to intercept in order to implement the selected military strategy, and (2) which specific interceptors to assign to each attacker to implement the selected tactics within the rules of engagement. 2. In air defense, that degree of control exercised over the operational functions of an air defense unit that are related to detection, identification, engagement,

Engagement Authorization

The authorization given by USCINCSPACE to use weapon and sensor systems under previously coordinated and authorized rules, procedures, and conditions.

Engagement Planning A set of rules and parameters to be used in developing weapon-target assignments and for sensor resource management. (USSPACECOM)

Engagement Surveillance

The surveillance required to support RV negation in the midcourse tier.

Engagement Time

The time that a weapon takes while engaging a given target. This includes not only firing at the target but all other necessary weapon functions involved that are unique to that particular target.

Engineering Change Proposal (ECP)

A proposal to the responsible authority recommending that a change to an original item of equipment be considered, and the design or engineering change be incorporated into the article to modify, add to, delete, or supersede original parts.

Engineering and Manufacturing Development (EMD) The third phase in the acquisition process, following Milestone II. The system and its supporting items are fully developed, engineered, designed, fabricated, tested, and evaluated. The intended output is a preproduction system that closely approximates the final product, the documentation necessary to enter the production phase, and the test results demonstrating that the production product will meet stated requirements.

Engineering Development

A funding category including those development programs being engineered for service use but which have not yet been approved for procurement or operation. Money under budget activity 6.4.

Engineering Development Model

An advanced prototype used during the Engineering and Manufacturing Development phase (EMD) to resolve design deficiencies, demonstrate maturing performance, and develop proposed production specifications and drawings.

ENGR Engineer.

Engr Engineering.

ENNK Endoatmospheric Non-Nuclear Kill.

ENSCD Enemy Situation and Correlation Division (JFACC term).

Environmental Assessment (EA) A concise public document whose primary purpose is to provide sufficient analysis of environmental effects of an action to determine whether to prepare an environmental impact statement or a finding of no significant impact.

Environmental Impact Statement (**EIS**) A detailed written statement analyzing the environmental effects of a major Federal action.

Environmental Security

A specialized form of physical security that prevents technical penetration, e.g., penetration by waves of electron beams.

Environments

The media, conditions, and/or physical objects in which a BMD asset is immersed or surrounded. For BMD systems and elements, the comprehensive environments definition consists of natural, hostile, induced, and storage, transportation and handling categories.

EO

- 1. Electro-Optical. 2. Engagement Operations. 3. End Office. 4. Eyes Only.
- 5. Executive Order [Chief, US Executive, i.e., the President]

EO/IR See Electro-Optics Infrared.

EOA Early Operational Assessment.

EOB 1. Enemy Order of Battle. 2. Electronic Order of Battle.

EOC 1. See Element Operations Center. 2. Emergency Operations Center.

3. Early Operational Capability (Deployment/Fielding term). 4. End of Contract.

EOCM Electro-Optic Countermeasure.

EOCT Element Operations Center Test Bed.

EOD Explosive Ordnance Detail.

EOM End of Message.

EOP Executive Office of the President.

EORSAT ELINT Ocean Reconnaissance Satellite (US).

EOS Earth Orbiting System (NASA term).

EOSH Environmental Operational Safety and Health.

EP 1. See Engagement Planning. 2. Evaluation Plan.

3. Engagement Planner (NMD BMC3 term).

EP Cycle Engagement Planner Cycle (NMD BMC3 term).

EPA Environmental Protection Agency.

EPD Engineering Product and Development.

Ephemeris/ Ephemerides 1. A table showing the positions of an object in space at regular intervals of time. 2. A publication giving the computed places of the celestial bodies for each day of the year

or for other regular intervals.

EPITS Essential Program Information Technology and Systems.

EPL Emitter Parameter Listing (USN term).

EPLRS Enhanced Position Locator Reporting System.

EPO 1. ERINT Project Office (USA term). 2. Element Program Office.

EPP Electric Power Plant (PATRIOT).

EPROM Electrically Programmable Read-Only Memory.

EQEC EurQuantum Electronics Conference (See CLEO).

Equipment Operationally Ready The status of an item of equipment in the possession of an operating unit that indicates it is capable of fulfilling its intended mission and in a system configuration that offers a

high assurance of an effective, reliable, and safe performance.

ER 1. Enhanced Radiation ("neutron bomb"). 2. Extended Range.

ERA Explosive Reactive Armor.

ERADCOM OBSOLETE. Army Electronics Research and Development Command. (Now

Laboratory Command (LABCOM), Adelphi, MD.)

ERCS Emergency Rocket Communications System (US).

ERD Element Requirements Document.

ERG Executive Review Group.

ERINT OBSOLETE. Extended Range Interceptor. Now referred to as PAC-3.

ERIS OBSOLETE. Exoatmospheric Reentry Vehicle Interceptor Subsystem. The GBI, an

NMD element, replaces ERIS.

ERIS(F) OBSOLETE. ERIS Farm.

ERP Emitted Radiative Power.

ERR 1. Element Requirements Review. 2. Engineering Release Record.

ERS 1. Early Release of Submunitions. 2. Emergency Response System.

ESA 1. Electronically Scanned Array. 2. European Space Agency.

ESAD Electronic Safe and Arm Device.

ESAR Extended Subsequent Application Review.

ESC 1. Electronic System Center (AFMC), Hanscom AFB, MA.

2. Electronic Security Command.

ESCN Existing Systems and Center Notebook.

ESD OBSOLETE. Electronic Systems Division. (Now Electronic Systems Center, Hanscom

AFB, MA.)

ESH Environmental, Safety and Health.

ESI External Systems Integration.

ESI ICD External Systems Integration Interface Control Document.

ESM 1. Electronic Warfare Support Measures. 2. Electronic Support Measures.

ESMC Eastern Space and Missile Center, Patrick AFB, FL.

ESNet Energy Sciences Network.

ESPRIT European Strategic Program of Research in Information Technology.

ESQD Explosive Safety Quantity Distance.

ESSM Evolved (Enhanced) Sea Sparrow Missile.

ET&C Extended Tracking and Control.

ETA Estimated Time of Arrival.

ETC 1. Electro-Thermal Chemical. 2. Estimated Time-to-Completion.

ETD 1. Estimated Time of Departure. 2. Electronic Transfer Device.

ETERTS End-to-End Real Time Simulator.

ETESD End-to-End Sensor Demonstration.

ETI Estimated Time of Intercept.

ETIC Estimated Time for Completion.

ETM Engineering Test Model.

ETR 1. See Eastern Test Range. 2. Environmental Test Round. 3. Estimated Time to Repair.

ETS 1. Experimental Test System. 2. Experimental Test Site.

EU European Union (formerly European Community (EC)).

EUCOM European Command. See USEUCOM.

EURATOM European Atomic Energy Agency.

EUREKA European Research and Coordinating Agency.

EUT See Early User Test.

EV Experimental Version.

EVA Extravehicular Activity.

Evasive MRV A reentry vehicle which maneuvers for the purpose of evading defensive weapons.

Event Based Contracting

Support "event driven acquisition strategy" by linking specific contractual events to the "exit criteria" for the acquisition phase, or to intermediate development events established for the acquisition strategy.

Event Driven Acquisition Strategy An acquisition strategy that links program decisions to demonstrated accomplishments in development, testing, and production.

Event Validation A sensor element internal process that results in a determination by the operator that the sensor is healthy and the event reported is real.

Event Verification The process by which it is decided, from SDS external data, that the event reported is real.

Evolutionary Acquisition

An approach in which a core capability is fielded, and the system design has a modular structure and provisions for future upgrades and changes as requirements are refined. An evolutionary acquisition strategy is well suited to high technology and software intensive programs where requirements beyond a core capability can be generally, but not specifically, be defined.

Evolutionary Requirements Definition Mission needs are first expressed in broad operational capability terms, then

progressively evolved to system specific performance requirements.

EVPA Experimental Version Performance Assessment.

EVPA/TEVS Experimental Version Performance Assessment Test Environment System.

EVS Enhanced Verdin System.

EW 1. See Electronic Warfare. 2. Early Warning.

EW/AA Early Warning and Attack Assessment.

EWCC Expanded Weapons Control Computer (PATRIOT).

EWDA Energy and Water Development Appropriations (US).

EWG Event Working Group.

EWN Early Warning Net.

EWO Electronic Warfare Officer.

EWPE Electronic Warfare Pre-Processing Element.

EWR Early Warning Radar.

EWS Early Warning System.

EXCEDE Electron Accelerator Experiment.

Excimer A contraction for "excited dimer"; a type of lasant. A dimer is a molecule consisting of

two atoms. Some dimers (e.g., xenon chloride and krypton fluoride) are molecules which cannot exist under ordinary conditions of approximate thermal equilibrium but must be created in an "excited" (e.g., energized) condition by special "pumping"

processes in a laser.

Excimer Laser

(EXL)

A laser in which emission is stimulated when a gas is shocked with electrical energy

and the excited medium emits light when returning to a ground state.

EXCOM Executive Committee.

Executable Program

A program is executable if the PM has adequate near-term approved funding.

Executing

Agencies or organizations (DoD or non-DoD) that are managing BMD-related programs.

Elements Executing Agent

The individual within the executing element assigned responsibility for managing

BMDO funded programs.

Executing Responsibility

Program Manager responsibility.

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, joint, or single-Service exercise, depending on participating organizations.

See also Command Post Exercise.

EXIT External Interface and Test.

Exit Criteria Program specific accomplishments that must be satisfactorily demonstrated before an

effort or program can progress further in the current acquisition phase or transition to the next acquisition phase. Exit criteria may include such factors as critical test issues, the attainment of projected growth curves and baseline parameters, and the results of risk reduction efforts deemed critical to the decision to proceed further. Exit criteria supplement minimum required accomplishments and are specific to each acquisition

phase.

EXL See Excimer Laser.

Exo Decoy A decoy that matches RV signature exoatmospherically. Exo decoys can use radar

and/or optical means to deceive sensors.

Exoatmospheric Outside the Earth's atmosphere; generally considered to be altitudes above 100 km.

Exoatmospheric Test Bed (XTB) Exoatmospheric Reentry Vehicle Interceptor Subsystem (ERIS) Flight qualified and range integrated vehicle to support other programs such as GBI-X.

OBSOLETE. Interceptor designed to provide functional test validation of GBI.

Expert Systems Software programs which use artificial intelligence techniques to capture and apply the

non-algorithmic knowledge and procedures of human experts.

Expired Appropriation

An appropriation that is no longer available for new obligation but is still available for disbursement to liquidate existing obligations. Under current legislation no disbursement may be recorded or paid after a five year expiration period. Maintains all original

accounting identity, e.g. FY, appropriation, PE, etc.

EXPLAN Exercise Plan.

Explicit Coordination

A battle management technique which communicates results, decisions or command from one battle manager to another, usually from a higher command to a lower

command.

Extended Planning Annex

A document providing program guidance for an additional 10 years beyond the POM.

F 1. Fluorine. 2. Fahrenheit.

F/O 1. Fiber Optic. 2. Follow-On.

FA 1. Field Artillery. 2. Feasibility Assessment.

FA/RD Functional Analysis/Requirements Definition.

FAA Federal Aviation Administration.

FAAD Forward Area Air Defense (US Army).

FAAD C2I Forward Area Air Defense Command, Control and Intelligence.

FAADS Forward Area Air Defense System (JCS term).

FAAWC Fleet/Force Anti-Air Warfare Commander.

FAB Fly Along Probe.

Fac Facility (MILCON term).

FACP Forward Area Control Post (JFACC term).

FACSPMF Federal Agency Computer Security Program Manager's Forum

FAD 1. Force Activity Designator. 2. Feasible Test Date.

FADEC Full-Authority Electronic Controls.

FAFB Falcon AFB, CO.

FAFBR Falcon AFB Regulation.

Fairing Structure to protect the payload during ascent phase.

FAIT Fabrication Assembly, Inspection/Integration, and Test.

FALCON Fission-Activated Light Concept.

FAM Functional Area Management.

FAMIS Financial Accounting Management Information System.

FAMP Facilities Acquisition Management Plan.

FAMSIM Family of Simulations (USA term).

FAR See Federal Acquisition Regulation.

Far Field The region far from an antenna compared to the dimensions of the antenna and the

wavelength of the radiation.

FAS 1. Fly Away Sensor (TCMP). 2. Federation of American Scientists.

FAST Facility Allocation Study Team.

Fast-Burn A ballistic missile that burns out much more quickly than current versions, possibly Booster (FBB)

before exiting the atmosphere entirely. Such rapid burnout complicates a boost-phase

defense.

FAT 1. First Article Testing. 2. Factory Acceptance Test.

Fault Tolerance The ability of a processor to maintain mission effectiveness after some subsystems have

failed.

Fax Facsimile.

FBB See Fast-Burn Booster.

FBIS Foreign Broadcast Information Service (US).

FBM Fleet Ballistic Missile.

FBMS Fleet Ballistic Missile System (USN term).

FBP Forward Based Probe.

FBR Forward-Based Radar (USA term).

FBS Forward-Based System.

FBXR Forward-Based X-band Radar.

FC 1. Fire Control [of weapons]. 2. Fund Code.

FCA See Functional Configuration Audit.

FCC Federal Communications Commission.

FCCM Facilities Capital Cost of Money.

FCN See Fully Connected Network.

FCO Field Change Order.

FCRC OBSOLETE. Federal Contract Research Center.

FCS Fire Control Section.

FCT Foreign comparative testing.

FD 1. First Deployment. 2. Final Draft. 3. Foreign Disclosure

FDA Food and Drug Administration.

FDC Fire [of weapons] Direction Center.

FDG Foreign Disclosure Guide.

FDM Function Description Manual.

FDO Fee Determining Official. **FDP** Flight Demonstration Program.

FDR 1. Final/Formal Design Review. 2. Future Data Radio (US Army term, c. 1994).

FDRU Final Design Review Update (BMDO PAC term).

FDS 1. Flight Demonstration System. 2. Fault Detection System.

FDSV Flight Demonstration Space Vehicle.

FDT&E See Force Development Test and Evaluation (US Army).

FDX Full Duplex (TelComm/Computer term).

FEA 1. See Functional Economic Analysis. 2. Front-End Analysis.

Feasibility Study A study of the applicability or desirability of any management or procedural system from

the standpoint of advantages versus disadvantages in any given case.

FEBA Forward Edge of the Battle Area.

FECA Front-End Cost Analysis.

FED Federal.

FEDCAC Federal Computer Acquisition Center.

Federal Acquisition Regulation The primary regulation for use by federal executive agencies for acquisition of supplies and services with appropriated funds. It directs the defense program manager in many ways, including contract award procedures, acquisition planning, warranties, and establishing guidelines for competition. The FAR is supplemented by the Military Departments and by DoD. The DoD supplement is called DFARS (Defense FAR Supplement).

FEDSIM Federal System Integration and Management.

FEL See Free Electron Laser.

FEMA Federal Emergency Management Agency.

Fenced Funding An identified aggregation of resources reviewed, approved, and managed as a distinct

entity. The proposed program must be implemented within specified resources. Examples of fences areas are: Intelligence and Security, Support to Other Nations.

FER Financial Execution Review.

FES Facility Engineering Surveillance Plan.

FET Field Effect Transistor.

FEU Flight Evaluation Unit.

FEWS Follow-on Early Warning System.

FF Firefinder radar (USA).

FFBD Functional Flow Block Diagram.

FFCD Full, Final and Complete Disclosure (Treaty negotiation term).

FFD Fraction of Failure Detected.

FFH Fast Frequency Hopping.

FFP Firm Fixed Price.

FFRDC Federally Funded Research and Development Center.

FGC Functional Group Code (Navy ILS term).

FGEP See Fixed Ground Entry Point.

FH Flight Hours.

FI Fault Isolation.

FI&A Fault Isolation and Analysis.

FIDO Fighter Duty Officer (JFACC term).

Field of View

(FOV)

The angular measure of the volume of space within which the system can respond to the

presence of a target.

Fighting Mirror

(FMIR)

Part of the GBL System. The low orbit mirror which receives laser energy and reflects it

to the target.

Figure of Merit

(FOM)

The numerical value assigned to a measure of effectiveness, parameters, or other figure,

as a result of an analysis, synthesis, or estimating technique.

FIP Federal Information Processing.

FIPS Federal Information Processing Standard.

FIPSPUBS Federal Information Processing Standards Publication.

Fire Control The control of all operations related to applying a weapons system's fire on a target.

Fire Control System A group of interrelated fire control equipment and/or instruments designed for use with a

weapon or group of weapons.

Fire Support Coordinating Line

(FSCL)

A line established by the appropriate ground commander to ensure the coordination of fire not under the commander's control but may affect current tactical operations. The fire support coordination line is used to coordinate fires of air, ground, or sea weapons systems using any type of ammunition against surface targets. The fire support coordination line should follow well defined terrain features. The establishment of the FSCL must be coordinated with the appropriate tactical air commander and other supporting elements of the FSCL without prior coordination with the ground force commander provided the attack will not product adverse effects on or to the rear of the line. Attacks against surface targets behind this line must be coordinated with the

appropriate ground force commander.

Fire Support Coordinating Measure A measure employed by land or amphibious commanders to facilitate the rapid

engagement of targets and simultaneously safeguard friendly forces.

Firing Doctrine The ratio and manner of assigning numbers of interceptors against given attackers.

Alternatives include: One-on-one, salvo, shoot-look-shoot, shoot-fail-shoot, etc. The doctrine will be driven by the priority of targets being defended and the number of

interceptors available relative to the number of attackers.

Firing Rate The number of missiles fired per site per minute.

FIRMR Federal Information Resources Management Regulation.

FIRST Forum of Incident Response and Security Teams.

First Article First article includes preproduction models, initial production samples, test samples,

first lots, pilot models, and pilot lots. Approval involves testing and evaluating the first article for conformance with specified contract requirements before or in the initial stage

of production under a contract.

First Strike The first offensive action of a war (generally associated with nuclear operations).

First Unit Equipped Date The scheduled date an end item and its support elements are issued to the initial operational capability unit and training in the new equipment training plan has been

accomplished.

FIS Facility Installation Standard.

Fiscal Guidance The annual guidance issued by the SECDEF in the Defense Guidance which provides

the fiscal constraints that must be observed by the DoD Components in the formulation

of force structures and the FYDP, and by the OSD in reviewing proposed programs.

FISSP Federal Information System Support Program.

FIWC Fleet Information Warfare Center (USN term).

FIX Site Firing-in-Extension (Target Launch site in White Sands Missile Range Northern

Extension).

Fixed Costs Costs that do not vary with the volume of business, such as property taxes, insurance,

depreciation, security, and minimum water and utility fees.

Fixed Ground Entry Point (FGEP) A GEP which is not transportable. A GEP serves as a communications interface between a ground-based communications system and a communications satellite and performs both receive/transmit functions. The now OBSOLETE SDS would have had FGEPs as communications interfaces between the C²E and SDS space orbital/sub-orbital

elements.

Fixed Ground Station All hardware, software, and facilities located at a fixed ground site necessary to receive, process, support, and analyze mission status and data, and disseminate operational

messages.

FLAGE OBSOLETE. Flexible Lightweight Agile Guided Experiment. (Predecessor program to

Extended Range Interceptor (ERINT).)

FLC Federal Laboratory Consortium.

Fleet Satellite Communications System (FLTSATCOM) Operating at ultra high frequency (UHF), FLTSATCOM allows relatively low-cost terminals with simple antennas for use on highly mobile platforms. It has a relatively small capacity because of its much lower operating frequency. It provides a satellite communication system for high-priority communication requirements for the Navy and Air Force that encompasses almost the entire world. It supports other DoD needs as well. It consists of satellites in geosynchronous equatorial orbit, each with 23 communication channels in the UHF and SHF bands. The Navy has exclusive use of 10 channels for communication with its land, sea, and air forces. The Air Force uses 12 others as part of its AFSATCOM system for command and control of nuclear capable forces. The system has one 500 KHz channel allotted to the national command authorities.

Flexible Response The capability of military forces for effective reaction to any enemy threat or attack with actions appropriate and adaptable to the circumstances existing.

FLHER

Funds and Labor Hours Expenditure Report.

Flight Demonstration System (FDS) Part of the SBIRS Low Program Definition and Risk Reduction (PDRR) program phase. The FDS will consist of two satellites and a ground system being built by TRW/Hughes. The FDS satellites are to be launched in FY 99 for a two year test program to demonstrate operations and performance of a SBIRS Low concept, collect target and phenomenology data to support the objective system design, and validate cost estimating models.

Flight Path

The line connecting the successive positions occupied, or to be occupied, by an aircraft, missile, or space vehicle as it moves through air or space. (It is more commonly referred to as trajectory for space vehicles, especially ICBMs.)

Flight Readiness Firing A missile system test of short duration conducted with the propulsion system operating while the missile is secured to the launcher. Such a test is performed to determine the readiness of the missile system and launch facilities prior to flight test.

Flight Test

Test of an aircraft, rocket, missile, or other vehicle by actual flight or launching. Flight tests are planned to achieve specific test objectives and gain operational information.

Flight Test Vehicle (FTV) Prototype of airborne or spaceborne hardware used to validate a technology concept. FTV is also the acronym for Functional Technology Validation.

FLIR Forward Looking Infrared Radar.

FLOT Forward Line of Own Troops.

FLT Flight.

FLTSATCOM See Fleet Satellite Communications System.

Fluence (or Integrated Flux) The product (or integral) of particle (neutron or photon) flux and time, expressed in units of particles per square centimeter. The absorbed dose of radiation (in rads) is related to the fluence. (It should be specified whether this is incident or absorbed fluence).

Flyaway Cost

The total cost related to the production of a usable end item of military hardware. Flyaway cost includes the cost of procuring the basic unit (airframe, hull, chassis, etc.), a percentage of basic unit cost for changes allowance, propulsion equipment, electronics, armament, and other installed government-furnished equipment, and nonrecurring production costs. Flyaway cost equates to Rollaway and Sailaway cost.

FM 1. Flare Multiunit. 2. Frequency Modulation. 3. Functional Manger. 4. Force

Module(s). 5. Field Manual.

FMA Foreign Material Acquisition.

FMB Financial Management Board.

FMC Flexible Manufacturing Cell.

FMEA Failure Modes Effects Analysis (ILS term).

FMECA Failure Modes Effects and Criticality Analysis (ILS term).

FMIR See Fighting Mirror.

FMP Foreign Materiel Program.

FMS 1. Flight Mission Simulator (PATRIOT), Huntsville AL. 2. See Foreign Military Sales.

3. Fixed and Mobile Standard Segments (USA term).

FMTV Family of Medium Tactical Vehicles (USA term).

FNC Federal Network Council.

FO 1. Force Operations (PATRIOT). 2. Fiber-Optic.

FO Link Fiber Optic Link.

FOA Future Offensive Aircraft (UK RAF term).

FOB Forward Operations Base.

FOBS Fractional-Orbital Bombardment System.

FOC See Full Operational Capability.

Focal Plane The plane, perpendicular to the optical axis of the lens, in which images of points in the

object field of the lens are focused.

Focal Plane An FPA is a matrix of photon sensitive detectors which, when combined with low noise

Array (FPA) preamplifiers, provides image data for the signal frequencies of interest.

FOFA Follow-On Force Attack.

FOG Fiber-Optic Gyroscope.

FOIA Freedom of Information Act (US).

FOL Forward Operating Location.

FOLAN Fiber Optic Local Area Network.

Folded Optics Any optical system containing reflecting components for the purpose of reducing the

physical length of the system or for the purpose of changing the path of the optical axis.

Follow-On Operational Test and Evaluation (FOT&E) That test and evaluation that is necessary during and after the production period to refine the estimates made during operational test and evaluation, to evaluate changes, and to reevaluate the system to ensure that it continues to meet operational needs and retains its effectiveness in a new environment or against a new threat.

FOM

See Figure of Merit.

FON

Fiber Optic Network.

Footprint

1. An estimated area of possible reentry or the solid angle of a detector or linear area of a detector at a certain location. 2. Geographic area in which a focused satellite downlink can be received.

FOR

Field of Regard.

Force Closure

The point in time when a supported commander determines that sufficient personnel and equipment are in the assigned area of operations to carry out assigned tasks.

Force Development Test and Evaluation Tests employing representative users to examine definition of material requirements or support/assess development of doctrine, training, organization, and logistics for system acquisition. (U.S. Army).

Force Direction

The operational management of the forces.

Force Integration Staff Officer

Army individual assigned to ODCSOPS to serve as HQDA user representative for a specific system. Provides continuous coordination necessary for integration of a new system into the Army force structure.

Force Management The assessment of the effectiveness of the defense forces throughout an engagement and adjustment of tactics and the system configuration as necessary to effectively allocate resources to satisfy mission objectives.

Force Reliability

The percentage of the missile force that will successfully detonate within 3.5 CEPs of the target.

FORDTIS

Foreign Disclosure Technical Information System.

Foreign Government Information Information that is (1) provided to the United States by a foreign government or governments, an internal organization of governments, or any element thereof with the expectation, expressed or implied, that the information, the source of the information, or both, are to be held in confidence; (2) produced by the United States pursuant to or as a result of a joint arrangement with a foreign government or governments or international organization of governments requiring that the information, the arrangement, or both, are to be held in confidence.

Foreign Military Sales (FMS) That portion of U.S. security assistance authorized by the Foreign Assistance Act of 1961, as amended, and the Arms Export Control Act, as amended. The recipient provides reimbursement for defense articles and services transferred from the U.S. Includes case sales from stocks (inventories, services, training) by the DoD defense services.

Foreign Security Policy Model A mathematically precise statement of a security policy. To be adequately precise, such a model must represent the initial state of a system, the way in which the system progresses from one state to another, and a definition of a "secure" state of the system.

Form, Fit, and Function Data

Technical data pertaining to items, components or processes for the purpose of identifying source, size, configuration, mating and attachment characteristics, functional

characteristics and performance requirements.

Formal Qualification Review A systems level configuration audit conducted after system testing is completed to ensure that performance requirements have been met.

Formerly Restricted Data

Information removed from the RESTRICTED DATA category upon joint determination by DoE (or antecedent agencies) and DoD that such information relates primarily to the military utilization of atomic weapons and that such information can be adequately safeguarded as classified defense information.

FORSCOM U.S. Forces Command.

FORTRAN Formula Translation Language.

Forward Edge of the Battle Area (FEBA) The foremost limits of a series of areas in which ground combat units are deployed, excluding the areas in which the covering or screening forces are operating, designated to coordinate fire support, the positioning of forces, or the maneuver of units.

Forward Funding Carry-over of RDT&E funding into second year of appropriations availability. Requires

permission from high authority.

FOS Family of Systems (TMD).

FOSS Fiber-Optic Sensor System.

FOT Follow-On Technologies.

FOT&E See Follow-On Test & Evaluation.

FOTC Force Over-the-horizon Track Coordinator (USN term).

FOUO For Official Use Only.

Fourth Generation Language

A programming environment that produces both screen and report utilities for use by

lower-level programming environments.

FOV See Field of View.

FOV Radar [Full] Field of View Radar.

FP 1. Focal Plane. 2. Force Projection.

FPA See Focal Plane Array.

FPC Facilities Protection Committee.

FPI Fixed Price Incentive.

FPS Fixed Radar US).

FPTOC Force Projection Tactical Operations Center (USA term).

FQR Formal Qualification Review.

FQT Formal Qualification Testing.

FR 1. Federal Register. 2. France.

FRACAS Failure Reporting and Corrective Action System.

FRACS Forward Reaction Altitude Control System.

Fragmentation

Warhead

A warhead which releases small solid objects to damage or destroy its targets.

FRAS Free Rocket Anti-Submarine.

FRC Fire Control Radar.

FRD Facilities Requirements Document.

Free Electron

A type of laser which generates radiation by the interaction of an electron beam with a Laser (FEL) static magnetic or electric field. Loosely speaking, free-electron laser technology resembles and evolved from that used by particle accelerators ("atom smashers").

Lasers which are not free electron lasers are bound electron lasers.

Free Rocket A rocket not subject to guidance or control in flight.

Frequency The act of allocating frequencies, or bandwidths to a telecommunications system, Management necessary to minimize the potential interference between transmitting/receiving devices.

Approval of authorized use of a particular frequency, frequencies, or bands are

controlled by governing agencies and international agreement.

FRG Federal Republic of Germany.

FRN Force Requirement Number.

FROD Functionally Related Observable Differences.

FROG Free Rocket Over Ground.

FRP Full-Rate Production.

FRS Federal Reserve System.

FS&E Facility Siting and Environment (MILCON term).

FS3 Future Strategic Strategy Study.

FSAF Future Surface-to-Air [Missile] Family.

FSC 1. Fire Solution Computer. 2. Fire Support Coordination.

3. Federal Supply Code.

FSCATT Fire Support CATT [for Weapons] (USA term).

FSCL Fire Support Coordination Line.

FSD OBSOLETE. Full Scale Development Phase. See EMD.

FSE Fire Support Element. **FSM** Firmware Support Manual.

FSP Facility Security Plan.

FSS Fixed Satellite Service.

FSST Forward Space Support in-Theater.

FST Flight System Testbed.

FSU Former Soviet Union.

FSU Republics Former Soviet Union Republics.

FT 1. Flight Test. 2. Fault Tolerant.

ft foot.

FTC Federal Trade Commission.

FTD OBSOLETE. Foreign Technology Division (USAF), Wright-Patterson AFB, OH. See

NAIC.

FTI Fixed Target Indicator.

FTLS Formal Top-Level Specification.

FTP File Transfer Protocol (ADP/Internet term).

FTR Flight Test Round.

FTS 1. Flight Test Summary. 2. Federal Telephone Service.

FTS 2000 Federal Telecommunications System 2000.

FTV 1. Functional Technology Validation. 2. See Flight Test Vehicle.

FTX Field Training Exercise.

FU Fire Unit (PATRIOT).

FUE First Unit Equipped.

Full Mission Capable Material condition of an aircraft or training device indicting that it can perform all of its

missions. Also called FMC.

Full Operational Capability (FOC)

The full attainment of the capability to employ effectively a weapon, item of equipment, or system of approved specific characteristics, which is manned and

operated by a trained, equipped, and supported military unit or force.

Full Rate Production Production of economic quantities following stabilization of the system design and

prove-out of the production process.

Fully Configured End Item

The final combination of end products, component parts, and/or materials which is fully ready for its intended operational use. Normally all production units are fully configured. Research and development units may be considered fully configured if they are or are

planned to become operationally equivalent to the production units.

Fully Connected Network (FCN)

A network in which each node is directly connected with every other node.

Functional Analysis

An approach to the solution of a problem, in which the problem is broken down into its component function, such as intelligence, firepower, or mobility. Each relevant function is then further analyzed and broken down into smaller functional components until a level of molecularity suitable for solution of the problem is attained.

Functional Baseline

1. Established after the system requirements analysis/design activity has completed the definition of the system functions and associated data, interface characteristics, functional characteristics for key configuration items, and tests required to demonstrate achievement of each specified characteristic. This baseline is normally controlled by the Government. 2. In configuration management, the initial approved technical documentation for a configuration item. 3. Documentation describing a system's functional characteristics and the verification required to demonstrate the achievement of requirements.

Functional Configuration Audit (FCA)

The formal examination of functional characteristics test data for configuration item, prior to acceptance, to verify that the item has achieved the performance specified in its functional or allocated configuration identification.

Functional Economic Analysis (FEA)

A structured proposal that serves as the principal part of a decision package for enterprise leadership. It includes an analysis of functional process needs or problems; proposed solutions, assumptions, and constraints; alternatives; life-cycle costs; benefits and/or cost analysis; and investment risk analysis. It is consistent with, and amplifies, existing DoD economic analysis policy in DoD Instruction 7041.3.

Functional Kill

The destruction of a target by disabling vital components in a way not immediately detectable, but which nevertheless prevents the target from functioning properly. An example is the destruction of electronics in a guidance system by a neutral particle beam. Also referred to as "soft kill."

Functional Support

Systematized methodologies and procedures, or a common set of standards, applied to materiel acquisition programs.

Functional Technology Validation (FTV)

Program with the intent of proving or disproving a technology is useful for a given application. Also see Flight Test Vehicle.

Functional Testing

The portion of testing in which the advertised features of a system are tested for correct operation.

Funding Profile

Program funding, usually displayed in columnar spread sheet format by years, starting with previous year through current year and out-years.

Future Years Defense Program (FYDP)

The official DoD document that summarizes forces and resources associated with programs approved by the Secretary of Defense. Its three parts are the organizations affected, appropriations accounts and the 11 major force programs (strategic forces, airlift, R&D, etc.). Under the biennial PPBS cycle, the FYDP is updated in even years in April (POM); October (budget); and then in January (President's budget) of odd years. The primary data element in the FYDP is the Program Element (P.E.). Formerly known as the Five Years Defense Program.

FWCA Fixed Wing Combat Aircraft.

Fwd Forward.

FXBR Forward-based X-Band Radar.

FY Fiscal Year.

FYDP See Future Years Defense Program/Plan.

G Giga (one thousand million).

g gram.

G&A General and Administrative costs.

G&C Guidance and Control.

G&O Goals and Objectives.

G/A Ground-to-Air.

Ground-to-Ground.

GaAs Gallium Arsenide.

Galosh The Soviet Anti-Ballistic Missile system built to defend Moscow from missile attack.

Gamma-Ray Electromagnetic radiation resulting from nuclear transitions. Although incorrect, high-

energy radiation, particularly "bremsstrahlung," is sometimes referred to as gamma

radiation.

Gamma-Ray A laser which generates a beam of gamma rays; also called a "graser." A gamma-ray

Laser laser, if developed, would be a type of x-ray laser; although it would employ nuclear reactions, it need not (but might) employ nuclear fission or fusion reactions or

explosions.

GAMS GPS (Global Positioning System)-Aided Munitions.

GaNMPA Gallium Nitride Microwave Power Amplifiers. (A demonstration program to develop

GaN based transistors and integrated circuits for power amplifiers in systems such as Ground Based Radar. Goal is to reduce total weight and size by a factor of 10).

GAO General Accounting Office.

GARDIAN General Area Defense Integrated Anti-missile Laser System.

GAT Government Acceptance Testing.

GAT CALL Guidance, Apportionment, and Targeting Call (JFACC term).

GATE Graphic Analysis Tool Environment.

Gateway An element that contained a node on the SDS backbone network as well as on some

other network(s) and would have performed protocol and format conversions necessary

to accept messages from one network and retransmit them on the other.

GATS GPS (Global Positioning System)-Aided Targeting System.

GB 1. Ground-Based. 2. Gigabyte.

GBD Global Burst Detector.

GBDL Ground-Based Data Link.

GBEV Ground-Based Experimental Version.

GBFEL Ground-Based Free Electron Laser.

GBHE Ground-Based Hypervelocity Gun Experiment.

GBHRG Ground-Based Hypervelocity Rail Gun.

GBI Ground-Based Interceptor. A long range, hit-to-kill, non-nuclear, exoatmospheric

interceptor of reentry vehicles from strategic intercontinental ballistic missiles. The GBI is an element of the NMD weapons system, which is being developed to protect the United States. The GBI is being designed to engage post-boost and/or RVs during the midcourse phase of their flights and will be fully compliant with ABM Treaty

requirements. The GBI is the successor to ERIS. See also EKV.

GBI-P Ground-Based Interceptor - Prototype.

GBI-X Ground-Based Interceptor Experiment. An experiment intended to promote competition

in GBI development and infuse advanced technology in its design and manufacture.

GBKV Ground-Based Kinetic Kill Vehicle.

GBL Ground-Based Laser.

GBLD Ground-Based Launcher Demonstration.

GBLRS Ground-Based Laser Repeater Station.

GBM Global Battle Managers.

GBMD Global Ballistic Missile Defense.

GBMI Ground-Based Midcourse Interceptor.

GBOS Ground-Based Optical System.

GBPST Ground-Based Passive Signal Tracking.

GBR Ground-Based Radar (NMD Weapons System element).

GBR-M Ground-Based Radar-Midcourse (NMD program term).

GBR-O Ground-Based Radar-Objective (NMD program term).

GBR-P Ground-Based Radar-Prototype (NMD program term).

GBR-T 1. Ground-Based Radar-Theater [c. 1994].

2. Terminal Defense /Ground-Based Radar [c. 1996].

GBR-X Ground-Based Radar - Experimental.

GBRF Ground-Based Radio Frequency.

GBRI Ground-Based Rocket Interceptor.

GBRT See Ground-Based Radar Terminal.

GBS Ground-Based Sensor (USA term).

GC&A 1. Guidance, Control, and Avionics. 2. Guidance, Control, and Airframe.

GCC Ground Component Commander (JFACC term).

GCCS Global Command and Control System (see WWMCCS).

GCI Ground Control Intercept.

GCN Ground Communications Network.

GCS Ground Control Station.

GD General Dynamics.

GDL Gas Dynamic Laser.

GEDI Ground-Based Electromagnetically-Launched Defensive Impactors.

GEM See Guidance Enhanced Missile (PATRIOT).

General Manager Program

Program Management Directive (GPMD) OBSOLETE. The primary document used by the GM to direct the Service BMD PEO on

the specific actions necessary to fulfill BMD program requirements.

General Specifications

A general specification covers requirements common to two or more types, classes, grades, or styles of products, services or materials; this avoids the repetition of common requirements in detail specifications. It also permits changes to common requirements to be readily affected. General specifications may also be used to cover common requirements for weapons systems and subsystems.

GEO Geosynchronous Earth Orbit.

GEODSS Ground-based Electro-Optical Deep Space Surveillance System

Geostationary Orbit (GSO) An orbit 35,784 km above the equator. A satellite placed in such an orbit revolves around the earth once per day, maintaining the same position relative to the surface of the earth. It appears to be stationary, and is useful as a communications relay or as a

surveillance post.

GEP Ground Entry Point. A GEP serves as a communications interface between a ground-

based communications system and a communications satellite, performing both receive

and transmit functions. See also FGEP.

GES Ground Engineering System.

GFE Government Furnished Equipment. See Government Furnished Property.

GFI Government Furnished Information.

GFM Government Furnished Material. See Government Furnished Property.

GFM/P Government Furnished Material and Property. See Government Furnished Property.

GFP See Government Furnished Property.

GFS Government Furnished Software. See Government Furnished Property.

Ghosting This condition occurs when two or more targets reside close to the same plane also

containing two sensors viewing the targets so they are within experimental determination of having the same hinge angle F. Thus, ghosting depends on LOS error

and positions.

GHz Giga Hertz (1 x 10⁹ Hz).

GIDEP Government/Industry Data Exchange Program.

GIF Generic Interface.

GII Global Information Infrastructure.

GIP Ground Impact Point.

GIS Geographic Information System.

GITIS Government Integrated Technical Information System.

GLCM Ground-Launched Cruise Missile.

Global Environment (GE) The ISTC Global Environment is responsible for the creation, propagation, and maintenance of test scenario common knowledge, how subsets of this information will be determined, and how common knowledge will be disseminated to the various element representations (nodes). The Global Environment performs functions which are common to the scenario such as timing, health, status, state vectors of objects, and

effects models.

Global Positioning System (GPS) The NAVSTAR Global Positioning System is a space-based radio navigation network providing precise positioning and navigation needs of all the military services. In the fully operational configuration, there will be 18 satellites in six orbital planes with an orbit period of 12 hours at 10,900 nautical miles altitude. Each satellite transmits three L-band, pseudo-random noise-coded signals, one S-band, and one ultra high frequency for spacecraft-to-spacecraft data relay.

Global Protection Against Limited Strikes (GPALS) OBSOLETE. GPALS was an architecture denoting an anti-missile system designed to provide protection against limited ballistic missile strikes, be they deliberate, accidental or unauthorized--whatever their source. GPALS was composed of three interrelated segments: (1) theater ballistic missile defenses, and associated space-based sensors, to protect U.S. forces deployed abroad, and our friends and allies; (2) ground-based defenses, with space sensors, to protect the entire United States against long-range ballistic missiles; and (3) interceptors based in space -- Brilliant Pebbles -- capable of providing continuous, global coverage by intercepting enemy ballistic missiles with ranges greater than several hundred miles.

Global Protection Against Limited Strikes (GPALS) Program OBSOLETE. The GPALS Program consisted of six Major Defense Acquisition Programs: GPALS System/BMC³, National Missile Defense (NMD), Global Missile Defense (GMD), Upper Tier Theater Missile Defense (UTTMD), Corps SAM, and PATRIOT. Army PEO GPALS was redesignated PEO Missile Defenses in 1992.

GLOBIXS Global Information Exchange System.

GLONASS Global Navigational Satellite System.

GLOW Gross Lift-Off Weight.

GLP Ground Launched Probe. See Brilliant Eyes Probe.

GLS Ground-Launched Sensor.

GM 1. Guided missile. 2. General Manager.

GMACC Ground Mobile Alternate Command Center.

GMAOC Ground Mobile Alternate Operations Center.

GMCC Ground Mobile Command Center.

GMCP Ground Mobile Command Post.

GMD Global Missile Defense.

GMT Greenwich Mean Time.

GMTT&C Ground Mobile Tracking, Telemetry, and Control.

GN&C Guidance, Navigation, and Control.

GNC&P Guidance, Navigation, Control and Propulsion.

GND Ground.

GOCO Government Owned, Contractor Operated.

GOES Geostationary Operational Environmental Satellite.

GOI Government of Israel.

GOJ Government of Japan.

GOSG General Officer Steering Group.

GOSIP Government Open Systems Interconnect Profile (CALS term).

GOSP Government Open System Protocol (CALS term).

GOTS Government-Off-The-Shelf (FAR term).

Gov't Government.

Government Furnished Property Property in the possession of, or directly acquired by, the Government and subsequently

made available to the contractor. (See FAR 45.101.)

GP Group.

GPALS See Global Protection Against Limited Strikes.

GPC Global Protection Center.

GPMD See General Manager Program Management Directive.

GPO Government Printing Office (US).

GPP General Purpose Processor.

GPS 1. See Global Positioning System. 2. Global Protection System.

GPSIU GPS Interface Unit.

GPU Guidance Processor Unit (USA term).

Graceful Degradation A condition in which a system continues to operate, providing service in a degraded

mode rather than failing completely or catastrophically.

GRASER Gamma-Ray Amplification by Stimulated Emission of Radiation. (See Gamma-Ray

Laser.)

GRC General Research Corporation.

Green Code Interface software.

Ground Entry Point (GEP)

OBSOLETE. GEPs provide the communications interfaces between the SDS space

orbital/sub-orbital elements and the C²E. See IFICS.

Ground Mobile Regional Operations Center (GMROC) Transportable ground segment of the Regional Operations Center.

Ground Zero The point on the surface of the earth at, or vertically below or above, the center of a

planned or actual nuclear detonation.

Ground-Based Radar (GBR) A taskable, modular, multi-function, phased-array radar that provides surveillance, tracking and engagement planning data in post-boost, midcourse, and terminal flight phases within its capabilities. It also provides target discrimination, in-flight target updates (IFTUs), and target object maps (TOMs) to interceptor vehicles. See THAAD.

(USSPACECOM)

Ground-Based Defense

Those ground-based sensor and weapon systems of BMD.

Ground-Based Interceptor (GBI) A kinetic energy exoatmospheric interceptor with long flyout range to provide, where possible, a multiple engagement capability for defense of the U.S. with a relatively small number of missile launch locations. It is designed to engage post-boost vehicles and/or RVs in the midcourse phase of flight. (USSPACECOM) (Successor to Exoatmospheric Reentry Vehicle Interceptor Subsystem (ERIS).) See EKV.

Ground-Based Interceptor Experiment (GBI-X) Designed to infuse advanced technology and promote competitive environment for GBI.

Ground-Based Radar Terminal (GBRT) The sensor for the NMD system. An X-band, ground-based, phased array radar capable of detecting, tracking, and providing discrimination information to a ground-based interceptor.

Ground-based Surveillance and Tracking System (GSTS) OBSOLETE. A fast-response, rocket-launched Long Wavelength Infrared (LWIR) and visible waveband sensor which would have enhanced the information available from the SDS' mid-course sensor suite by providing tracking and discrimination data on potentially lethal targets.

GS Garrison Support (USA term).

GSA General Services Administration (US).

GSDC Ground Station Demonstration Lab.

GSE 1. Ground Support Equipment. 2. Government Support Equipment.

GSFC Goddard Space Flight Center, Greenbelt, MD.

GSII Government Services Information Infrastructure.

GSM Ground Station Module.

GSO See Geostationary Orbit.

GSR Ground Station Radar.

GSSP Generally-accepted Systems Security Principles.

GSTS OBSOLETE. A fast-response, rocket-launched, Long Wavelength Infrared (LWIR) and

> visible waveband sensor which would have enhanced the information available from the SDS' mid-course sensor suite by providing tracking and discrimination data on

potentially lethal targets.

GSTS(F) GSTS Farm.

GTA Ground Test Accelerator.

GTACS Ground Theater Air Control System.

GTE GTE Corporation.

GTF Guided Test Flights.

GTM Global Track Manager.

GTN General Technical Note.

GTR Gulf Test Range, Eglin AFB, FL.

GTSF Guidance Test and Simulation Facility (PATRIOT), Huntsville, AL.

GTV Guided Test Vehicle.

GUI Graphic User Interface.

Guidance 1. Direction, altitude control, and navigation (where appropriate) of sensors or

interceptor vehicles. 2. The entire process by which target intelligence information received by a guided missile is used to effect proper flight control to cause timely

direction changes for effective target interception.

Guidance **Enhanced Missile**

(GEM)

A companion program to PATRIOT PAC-2 which includes enhancements to the radar to

increase intercept range and performance.

Guidance System

(Missile)

A system which evaluates flight information, correlates it with target data, determines the desired flight path of the missile, and communicates the necessary commands to the

missile flight control system.

Guided Missile

An unmanned vehicle moving above the surface of the earth, whose trajectory or flight

path is capable of being altered by an external or internal mechanism.

GVSC

Generic VHSIC (Very High Speed Integrated Circuit) Spaceborne Computer.

GWAPS

Gulf War Air Power Survey, 1994 [a DoD-sponsored survey].

Gwd

Giga watt-days.

GWEN

Ground Wave Emergency Network.

 \mathbf{GZ}

Ground Zero.

h Hour.

H&S See Health and Status.

H/W Hardware.

HA Higher Authority.

HABE High Altitude Balloon Experiment.

HAC House Appropriations Committee (US).

HADS High Altitude Defense System.

HALE High Altitude Long-Endurance.

HALE UAV High Altitude Long Endurance Unmanned Aerial Vehicle.

Half-Value The thickness of a given material which will absorb half the gamma radiation incident Thickness (HVT)

upon it. This thickness is inversely proportional to its density and also depends on the

energy of the gamma rays.

HAMS Hardness Assurance, Maintenance and Surveillance.

Handoff This occurs when information on positions, velocities and tracks are given by one sensor

or system to another and the first sensor or system continues to track the objects.

Handover This occurs when information is passed on to another sensor or system in which the first

does not continue to track.

HAOI High Altitude Optical Imaging.

HAOIS High Altitude Optical Imaging System.

HAP High Altitude Probe.

Hard Kill (HK) Destruction of a target in such a way as to produce unambiguous visible evidence of its

neutralization.

Hardening Design and manufacturing process and other measures which may be employed to render

military assets less vulnerable.

HARDMAN Hardware/Military Manpower Integration (Navy ILS term).

Hardness A property of a target; measured by the power needed per unit area to destroy the target.

A hard target is more difficult to kill than a soft target.

Hardware Computer equipment features or devices used in an ADP system to preclude

Security unauthorized access to data or system resources.

Hardware-in-the-Loop (HWIL)

Tests in which BM/C³ computer and communication test systems will be in communication with some of the hardware test facilities developed for other BMD

technology programs.

HARM High Speed Anti-Radiation Missile.

HASC OBSOLETE. House Armed Services Committee (US). See HNSC. **HASP** Hardened Ada Signal Processor.

HATELM Highspeed Anti-TEL Missile.

HATMD High-Altitude Theater Missile Defense. (U.S. Army)

HAVE STARE Name assigned a proven sensor capability.

HAWK See Homing All-the-Way Killer.

HBCU/MI Historically Black Colleges and Universities/Minority Institutions.

HBHO Hardbody Handover [algorithms].

HCO High Consequence Option (Safety Engineering term).

HCT See Mercury Cadmium Telluride.

HDA Hybrid Detector Assembly.

HDBK Handbook.

HDR High Data Rate.

HDX Half Duplex (TelComm/Computer term).

HE 1. High Explosive. 2. High Energy. 3. Hardened Electronics.

Health and Status

(H&S)

Health and Status pertains to a unit's ability to assess the conditions of its subsystem functions. The term H&S is used for units in remote locations, such as satellites, where ground controls must interface with BITE to determine operational status of the satellite

and its equipment.

Heavy Replicas

(HREPS)

Decoys which by virtue of shape, size, and mass, closely approximate an RV's

signature. HREPS have significant off- load penalty.

HEDI OBSOLETE. See High Endoatmospheric Defense Interceptor.

HEDR High Endoatmospheric Defense Radar.

HEDS High Endoatmospheric Defense System.

HEI High Endoatmospheric Interceptor.

HEL High Energy Laser.

HELKS High Energy Laser Kill System.

HELLO High Energy Laser Light Opportunity.

HELSTF High Energy Laser Systems Test Facility, White Sands Missile Range, NM.

HELWS High Energy Laser Weapon System.

HEMP High Altitude Electromagnetic Pulse.

HEMTT Heavy Expanded Mobility Tactical Truck (US Army prime mover).

Hen House A Soviet area defense radar used as a component of the Moscow ABM system that

provides VHF coverage of space to monitor orbiting satellites and early warning of

ICBMs launched from the U.S.

HEO 1. See High Earth Orbit. 2. Highly Elliptical Orbit.

Hera An improved surrogate TBM test target.

HERO Hazards of Electromagnetic Radiation to Ordnance (SM-2 Bk IVA).

HESP High Efficiency Solar Panel.

HEU Highly Enriched Uranium.

HF 1. High Frequency. 2. Hydrogen fluoride. 3. Human Factors.

HF/DF 1. High Frequency/Direction Finding. 2. Hydrogen Fluoride/Deuterium Fluoride.

(Chemicals used in IR chemical lasers).

HFCNR High Frequency Combat Net Radio.

HFE Human Factors Engineering.

HgCdTe Mercury Cadmium Telluride.

HHB Headquarters and Headquarters Battery.

HIBEX High-Acceleration Boost Experiment.

HIBREL High Brightness Relay.

HIC See Human-in-Control.

HICOM High Command (Navy term).

HICTB Human-in-Control Test Bed.

HIDACZ High Density Aerospace Control Zone.

HIDAR High Data Rate.

High Density Aerospace Control Zone (HIDACZ) Airspace designated in an airspace control plan or airspace control order, in which there is a concentrated employment of various weapons and users. A HIDACZ has defined dimensions, that usually coincide with geographical features or navigational aides. Access to a HIDACZ is normally controlled by the maneuver commander. The maneuver commander can also direct a more restrictive weapons status within the

HIDACZ.

High Earth Orbit

(HEO)

An orbit about the earth at an altitude greater than 3,000 nautical miles (about 5,600 kilometers).

High

That portion of the earth's atmosphere, generally above 40 km altitude.

Endoatmosphere

High

Endoatmospheric Defense

Interceptor (HEDI)

OBSOLETE. Interceptor concept designed to engage RVs within the (upper or high

endo) atmosphere. (Predecessor to Endo-Exoatmospheric Interceptor (E²I).)

High Order Language (HOL) A programming language that requires little knowledge of the computer on which a program will run, can be translated into several different machine languages, allows symbolic naming of operations and addresses, provides features designed to facilitate expression of data structures and program logic, and usually results in several machine

instructions for each program statement.

Higher Authority Interface Policy, strategy, doctrine, readiness conditions, and rules of engagement from higher authorities for use by the defense system in conducting system operations including specific orders specifying actions such as testing, defense enabling, pre-delegation of authority, etc. Also the reporting of situation assessment and system readiness to higher

authority.

HIL Human In-the-Loop.

HIMAD High to Medium Altitude Air Defense.

HIMEZ High Altitude Missile Engagement Zone.

HIP Hot Isostatic Processing.

HIRAM High Resolution Infrared Auroral Measurements.

HISEM High Speed Environmental Multi-burst Model.

HIT 1. Heterojuncture Internal Photomissive. 2. Homing Interceptor Technology.

HK See Hard Kill.

HKV Hit to Kill Vehicle.

HLD Hardware Description Language.

HLLV Heavy Lift Launch Vehicle.

HMC&M Hazardous Material Control and Management.

HMI Human Machine Interface.

HMMWV High Mobility Multi-purpose Wheeled Vehicle (USA term) (pronounced Hum Vee)

HMPC Hazardous Maintenance Procedure Code.

HMSC Hughes Missile System Corporation.

HNSC House National Security Committee, formerly the House Armed Services Committee.

See HASC.

HOB Height of Burst.

HOE OBSOLETE. Homing Overlay Experiment. (Predecessor program to Exoatmospheric

Reentry Vehicle Interceptor Subsystem (ERIS).)

HOL See High Order Language.

Homing All-the-Way Killer (HAWK) 1. Upgrades to the HAWK interceptor and radar system to provide the Marine Corps with a mobile point theater ballistic missile defense capability. 2. A mobile air defense artillery, surface-to-air missile system that provides non-nuclear, low to medium altitude

air defense coverage for ground forces. Designated as MIM-23.

Homing Device A device, mounted on a missile, to aid its guidance to a target. The homing device uses

sensors to detect the position of, or to help predict the future position of a target, and then directs the missile to intercept it. The homing device usually provides frequent

target position updates during the flight of the missile.

Homing Guidance A system by which a missile steers itself towards a target by means of a self-contained

mechanism which is activated by some distinguishing characteristics of the target, such

as an infrared signature.

HOMS Homing Overlay Mission Simulation.

HOST Hardened Optical Sensor Testbed.

Host Installation A designated DoD facility that provides non peculiar SDS support to SDS elements.

Host Interface The interface between a communications processor and a host computer.

Host Nation Support Civil and/or military assistance rendered by a nation to foreign forces within its territory during peacetime, crisis or emergencies, or war based on agreements concluded

between nations.

Hostile

Environment

Those environments that result from a BMD system engagement of an enemy threat or collateral conditions resulting from deliberate hostilities. Hostile environment categories currently applicable to National Missile Defense are Nuclear, Battle Debris, and Electronic Warfare.

Hostile Track The classification assigned to a track that, based upon established criteria, is

determined to be an enemy threat.

hp Horsepower.

HPA High Power Amplifier.

HPC High Performance Computing.

HPCC High Performance Computing and Communications.

HPG Homopolar Generator.

HPI High Power Illuminator (Hawk).

HPIR High Power Illuminator Radar.

HPL High Power Laser.

HPM High Power Microwave.

HQ Headquarters.

HQMC Headquarters, Marine Corps.

HRDS High Resolution Display System.

HREPS See Heavy Replicas.

HRR High Range Resolution.

HRSA HICTB Requirements, Support and Analysis.

HSDB High Speed Data Bus (TelComm/Computer term).

HSFB High Speed Fleet Broadcast (Navy term).

HSI 1. See Human Systems Integration. 2. Human Systems Interface.

HSV Huntsville, Alabama.

HTCIA High Technology Crime Investigation Association.

HTI Horizontal Technology Initiative.

HTK Hit-to-Kill.

HTMIAC High Temperature Materials Information Analysis Center.

HTML Hypertext Markup Language.

HTPB Hydroxy-Terminated Poly Butadiene.

HTS 1. High Temperature Superconducting. 2. Hawaii Tracking Station.

HTSA Host Tenant Support Agreement.

HTSS Hardened- sub-miniature Telemetry and Sensor System.

HTTP Hypertext Transfer Protocol.

HUD Heads Up Display.

Human Factors A body of scientific facts about human characteristics. The term covers all biomedical

and psychosocial considerations; it includes, but is not limited to, principles and applications in the areas of human engineering, personnel selection, training, life

support, job performance aids, and human performance evaluation.

Human Factors Engineering The design of man-made devices, systems, and environments to enhance their use by

people. Also called human engineering, human factors, and ergonomics.

Human Intelligence (HUMINT) A category of intelligence derived from information collected and provided by human

sources.

Human Systems Integration The human considerations (human factors engineering, manpower, personnel, training, and safety and health hazards) that are integrated into the design effort for the defense system to improve total system performance and reduce costs of ownership by focusing

attention on the capabilities and limitations of the soldier, sailor, airman, or marine.

Human-in-Control Human-in-Control provides for the positive control of automated system processes. This

is accomplished by requiring human action to provide essential high-level commands such as initiate, terminate, and interrupt. With regards to BMD, 10 USC 2431, Section 224 states that: "No agency of the Federal Government may plan for, fund, or otherwise support the development of command and control systems for strategic defense in the boost or post-boost phase against ballistic missile threats that would permit such strategic defenses to initiate the directing of damaging or lethal fire except by affirmative human decision at an appropriate level of authority." (USSPACECOM)

HUMINT See Human Intelligence.

HVAA High Value Airborne Assets.

HVAC Heating, Ventilation, and Air Conditioning.

HVG See Hypervelocity Gun.

HVL Hypervelocity Launcher (Gun).

HVM See Hypervelocity Missile.

HVP Hypervelocity Projectile.

HVT See Half-Value Thickness.

HW Hardware.

HW/SW Hardware/ Software.

HWCI Hardware Configuration Item.

HWIL See Hardware-in-the-Loop.

HWILT Hardware-in-the-Loop Test.

HYLYE Hypersonic Low Temperature.

Hypervelocity Gun (HVG) A gun that can accelerate projectiles to 5 km per second or more; for example, an

electromagnetic or rail gun.

Hypervelocity Missile (HVM) A missile that can operate at a velocity greater than 4 km per second.

HYWAYS Hybrids with Advanced Yields for Surveillance.

Hz Hertz (cycles per second).

I&CO Installation and Check-Out.

I&I Installation and Integration.

I&PA Integration and Performance Analysis.

I&T Integration and Test.

I&W Indications and Warning.

I-CASE Integrated Computer-Aided Systems Engineering.

I-HAWK Improved HAWK.

I-MOSC Integrated Mission Operations Support Center (USAF term).

I/F Interface.

I/O Input/Output.

I/R Interchangeability/Reparability.

International Information Integrity Institute.

IA 1. Information Architecture.

2. Interoperability Architecture (see also TMD IA).

IA&I Industrial Affairs and Installations.

IA&T Installation (Integration), assembly, and test.

IAD Integrated Air Defense.

IADS Integrated Air Defense System.

IAEA International Atomic Energy Agency.

IAG See International Agreement Generator.

IAI Israel Aircraft Industries.

IAP 1. Integrated Action Plan. 2. Integrated Avionics Package.

IAS Israeli Architecture Study.

IAT Integrated Assembly Test.

IATACS Improved Army Tactical Communications System.

IATCO Integration, Assembly, Test & Check Out.

IAW In Accordance With.

IBA Industrial Base Assessment.

IBC Impurity Band Conduction.

IBCSi:As Impurity Band Conduction Arsenic Doped Silicon.

IBDL Intra-Battery Data Link.

IBID Integrated BMC³ Infrastructure Demonstration

IBIS Israeli Boost-Phase Intercept System.

IBM International Business Machines Corporation.

IBPA Industrial Base/Producibility Analysis.

IBR Integrated Baseline Review (DD 5000 term).

IBS Integrated Bridge System, a part of the Integrated Control System (ICS) for US naval

ships.

IBSS Infrared Background Signature Survey.

IC 1. Intelligence Community. 2. Integrated Circuit.

ICA 1. Independent Cost Analysis. 2. Independent Cost Assessment.

ICADS Integrated Correlation and Display System.

ICAF Industrial College of the Armed Forces.

ICAO International Civil Aviation Organization.

ICAS Integrated Condition Assessment System, a part of the Integrated Control System (ICS)

for US naval ships.

ICASE Integrated Computer Assisted Software Engineering.

ICBM See Intercontinental Ballistic Missile.

ICC 1. Information and Coordination Central (PATRIOT).

2. Item Category Code (ILS term).

ICCIP Inter-Center Council of Information Processing.

ICCITS Inter-Center Council on Information Technology Security.

ICCN Inter-Center Council on Networking.

ICD Interface Control Document/Drawing.

ICE See Independent Cost Estimate.

ICEDEFFOR United States Forces Iceland.

ICM Improved Conventional Munitions.

ICN Installation Completion Notification.

ICO Interface Control Officer (JFACC term).

ICOE Initiations, Commitments, Obligations, Expenditures.

ICP 1. Integrated Contracting Plan. 2. Inventory Control Point (ILS term).

3. Interface Change Proposal. 4. Interface Control Process.

ICR See Integrated Contracting Report.

ICS 1. Integrated Control System, a computerized monitoring, command, and control system

for US naval ships.

2. Interface Control Specification.

ICU Interface Control Unit.

ICWG Interface Control Working Group.

ID 1. Interactive Discrimination. 2. Identification.

IDA Institute for Defense Analyses.

IDASC Improved Direct Air Support Center (USMC term).

IDB 1. Integrated Data Base. 2. Interface Definition Notebook.

IDD Interface Design Document.

IDEA Integrated Dose Environmental Analysis.

IDECM Integrated Defensive Electronics Countermeasures (USN/USAF term).

Identification Friend or Foe

(IFF)

A system using electromagnetic transmissions to which equipment carried by friendly forces automatically responds, fro example by emitting pulses, thereby distinguishing

themselves from enemy forces.

IDG Institute for the Dynamics of Geospheres.

IDHS Intelligence Data Handling System.

IDIP Integrated Development and Initial Production.

IDR 1. Initial Design Review. 2. Interim Design Review.

IDS 1. Interface Design Standards. 2. Intrusion Detection System.

IE 1. Independent Evaluation. 2. Integration Exercise.

IED Intrinsic Event Discrimination.

IEEE Institute of Electrical and Electronics Engineers.

IEI Integrated Engineering Infrastructure.

IEMP Induced Electromagnetic Pulse.

IEP Integrated Evaluation Plan.

IER 1. See Independent Evaluation Report.

2. Information Exchange Requirements.

IESG Internet Engineering Steering Group.

IETF Internet Engineering Task Force.

IEV Integrated Experimental Version.

IEW Intelligence and Electronic Warfare.

IFA Integrated Financial Analysis.

IFF Identification, Friend or Foe.

IFHV In-Flight Homing View.

IFICS In-Flight Interceptor Communications System. IFICS provides the communications link

between the ground and the space based NMD assets. The generic term IFICS replaces

the obsolete design specific communications system term GEP.

IFOG Interferometric Fiber Optic Gyroscope.

IFOV Instantaneous Field of View.

IFSR In-Flight Status Report.

IFT Integrated Flight Test.

IFTU See In-Flight Target (Threat) Update.

IG Inspector General.

IGEMP Internally Generated Electromagnetic Pulse.

IGES Initial Graphics Exchange Standard.

IGS Inertial Guidance System.

IGSM Interim Ground Station Module (JSTARS).

IGT Integrated Ground Test.

IGU Inertial Guidance Unit.

II 1. See Impulse Intensity. 2. Infrared Imagining.

IIP Interoperability Improvement Program.

IIPT Integration Integrated Product (Process) Team.

IIR 1. Intelligence Information Report. 2. Imaging Infrared.

IIS International Institute for Strategic Studies (UK).

IIT Inteceptor Integration Test.

IITF Information Infrastructure Task Force.

IJSOW Improved Joint Stand Off Weapon.

ILA Inter-Laboratory Authorization (Contracting term).

ILC Initial Launch Capability.

ilities The operational and support requirements a program must address (e.g., availability,

vulnerability, producibility, reliability, maintainability, logistics supportability, etc.).

Illumination Non-interfering impingement of electromagnetic energy on Red, Blue, or Gray satellites

and Red ballistic missiles in test.

ILS See Integrated Logistics Support.

ILS Manager.

ILS Management Team

ILSO ILS Office.

ILSP See Integrated Logistics Support Plan.

ILS Working Group.

IM See Information Management.

Imagery Collectively, the representations or objects reproduced electronically or by optical

means on film, electronic display devices, or other media.

Imagery Intelligence (IMINT) Intelligence derived from the exploitation of collection by visual photography, infrared sensors, lasers, electro-optics, and radar sensors (such as synthetic aperture radar) wherein images of objects are reproduced optically or electronically on film, electronic

display devices, or other media.

Imagery Correlation

The mutual relationship between the different signatures on imagery from different types

of sensors in terms of position and the physical characteristics signified.

Imaging The process of obtaining a high quality image of an object.

IMC 1. Interagency Management Council (GSA term).

2. Internal Management Control

IMDB Imagery Management Database.

IMDO Israeli Missile Defense Organization. BMDO counterpart in the Israeli Ministry of

Defense.

IMINT See Imagery Intelligence.

IMIP Industrial Modernization Incentives Program.

Immediate Kill

Mode

A kill mode in which the target is immediately catastrophically destroyed by impact

with the KV or KED.

IMOD Israeli Ministry of Defense.

IMP Integrated Master Plan.

Impact Point Prediction (IPP)

Prediction of the point on the earth's surface where a specific RV will impact, usually specified in terms of the circular error probable. The estimate includes the perturbing effects of the atmosphere and resultant uncertainties.

Implicit Coordination Many independent battle managers (computers) use the same algorithms to derive a common calculated result. Decisions resulting from these calculations will be identical even though the calculated results may not be identical. Decisions or results are not communicated between Battle Managers.

Impulse

A mechanical jolt delivered to an object. Physically, impulse is a force applied for a period of time, and the System Internationale Unit of impulse is the newton-second (abbreviated N-s). (See Impulse Intensity.)

Impulse Intensity (II) Mechanical impulse per unit area. The System Internationale unit of impulse intensity is the pascal-second (abbreviated Pa-s). A conventionally used unit of impulse intensity is the "tap", which is one dyne-second per square centimeter; hence, 1 tap = 0.1 Pa-s.

Impulse Kill

The destruction of a target, using directed energy, by ablative shock. The intensity of directed energy may be so great that the surface of the target violently and rapidly boils off delivering a mechanical shock wave to the rest of the target and causing structural failure.

IMPWG

Information Policy Working Group.

IMS

Integrated Master Schedule.

IMU

Inertial Measurement Unit.

IN

1. Air Force component intelligence officer (staff). 2. Instructor. 3. Impulse Noise.

in

Inch.

IN LINAC

Induction Linear Accelerator.

In-Flight Target Update (IFTU)

A report to in-flight interceptor weapons. The IFTU provides updated, predict-ahead target position, time, and velocity for use within the interceptor's control suite to make mid-course corrections to intercept the target.

In-Line

An operational, not dormant, component, equipment or element of a weapons system which is participating in accompliching the system's directed assignment by performing on-going functions. See also On-line.

In-Process Review (IPR)

Review of a project or program at critical points to evaluate status and make recommendations to the decision authority; also called Interim Program Review.

Iname

Individual Name.

Inclination

The inclination of an orbit is the (dihedral) angle between the plane containing the orbit and the plane containing the earth's equator. An equatorial orbit has an inclination of 0° for a satellite traveling eastward or 180° for a satellite traveling westward. An orbit having an inclination between 0° and 90° and in which a satellite is traveling generally eastward is called a prograde orbit. An orbit having an inclination of 90° passes above the north and south poles and is called a polar orbit. An orbit having an inclination of more than 90° is called a retrograde orbit.

Incremental Funding

The provision (or recording) of budgetary resources for a program or project based on obligations estimated to be incurred within a fiscal year when such budgetary resources will cover only a portion of the obligations to be incurred in completing the program or project as programmed. This differs from full funding, where budgetary resources are provided or recorded for the total estimated obligations for a program or a project in the initial year of funding.

Independent Cost Estimate (ICE)

A cost estimate prepared by an impartial body outside the chain of authority responsible for acquiring or using the goods or services.

Independent Cost Analysis

An analysis of program cost estimates conducted by an impartial body disassociated from the management of the program. (See Title 10, United States Code, Section 2434, "Independent Cost Estimates; Operational Manpower Requirements.")

Independent Evaluation Report (IER)

Documents the independent evaluation of the system and is based on test data, reports, studies, and simulations. The IER contains the independent evaluator's assessment of key issues, supporting analyses, major findings, and a position on the future capability of the system to fulfill approved requirements. The IER is provided to the DAB to support the MS III decision production decision. An IER may also be used to support LRIP decisions. (U.S. Army)

Independent Research and Development (IR&D)

Effort by industry that is not sponsored by, or required in performance of, a contract and which consists of projects falling within the areas of (1) basic and applied research, (2) development, and (3) systems and other concept formulation studies. Also, discretionary funds which industry can allocate to projects. (See FAR 31.001.)

Independent Verification and Validation (IV&V)

Verification and validation performed by a contractor or Government agency that is not responsible for developing the product or performing the activity being evaluated. IV&V is an activity that is conducted separately from the software development activities.

Indium Antimonide

Infrared sensing material.

Individual Acceptance Test

A test of predetermined critical items to verify their operational characteristics prior to assembly into subsystems. Waivers to this requirement, such as using the end item acceptance tests, are not recommended as a production expediency.

Induced Environments

Induced environments are defined at the system level as the disturbances in the natural environments caused by BMD system influences on other BMD assets (Self-Induced..e.g., GBR radar energy impacting and effecting a GBI in flight) or the influence of other systems external to BMD on BMD assets (Externally-Induced..e.g., high power electric line electromagnetic field effects on C²E electronic equipment).

Induced Radioactivity

Radioactivity produced in certain materials as a result of nuclear reactions, particularly the capture of neutrons, which are accompanied by the formation of unstable (radioactive) nuclei. In a nuclear explosion, neutrons can induce radioactivity in the weapon materials, as well as in the surroundings (e.g., by interaction with nitrogen in the air and with sodium, manganese, aluminum, and silicon in soil and sea water).

Industrial Resource Analysis (IRA)

A quick-turnaround or a detailed analysis of industrial and/or specific factory capabilities to determine the availability of production resources required to support SDS. These resources include capital (including machine tools and special tooling/test equipment), materiel, and manpower needed to meet the range of SDS requirements. IRA includes the results of feasibility studies, producibility analyses, and technology assessments. Shortfalls discovered in IRAs are assessed for risk levels, based on the reasons for the risks, and become issues listed in the BMDO Producibility Programming and Issues Resolution Strategies (PPIRS) document.

Inertial Guidance

A guidance system designed to project a missile over a predetermined path, wherein the path of the missile is adjusted after launching by devices wholly within the missile and independent of outside information. The system measures and converts accelerations experienced to distance traveled in a certain direction.

Inertial Measurement Unit (IMU)

A guidance mechanism designed to project a missile over a predetermined path, wherein the path of the missile is adjusted after launching by devices wholly within the missile and independent of outside information. The unit measures and converts accelerations experienced to distance traveled in a certain direction.

INETS

- 1. Integrated Effects Tests for Survivability.
- 2. Integrated Nuclear Environment Testbed Simulator.

INEWS

Integrated Electronic Warfare System (Navy term).

INF

Intermediate-range Nuclear Force (Treaty term). Also the name of an U.S./USSR Treaty.

Information Architecture (IA)

A description of the information that is needed to support command and control decision making and battle management, where it comes from, the processing that must be performed to provide it, and the resulting behavior. The description provides the invariant framework for interoperability, operational and design flexibility, coping with the unexpected, extensibility, and reusability.

Information Resources Management

The planning, budgeting, organizing, directing, training, promoting, controlling, and management activities associated with the burden, collection, creation, use, and dissemination of information by agencies and includes the management of information and related resources, such as FIP resources.

Information Security (INFOSEC)

Those measures and administrative procedures for identifying, controlling, and protecting against unauthorized disclosure of classified information or unclassified controlled information, which includes export-controlled technical data and sensitive information. Such measures and procedures are concerned with security education and training, assignment of proper classifications, downgrading and declassification, safeguarding, and monitoring.

Infrared (IR)

Electromagnetic radiations of wavelength between the longest visible red (7,000 Angstroms or 7 x 10E4 millimeter) and about 1 millimeter. (See Electromagnetic Radiation.)

Infrared (IR) Electro-Optics

Technologies/techniques employed by optical sensors in the wavelength spectrum slightly longer than visible but shorter than radio.

Infrared Imagery

That imagery produced as a result of sensing electromagnetic radiations emitted or reflected from a given target surface in the infrared position of the electromagnetic spectrum.

Infrared Sensor

A sensor designed to detect the electromagnetic radiation in the wavelength region of 1 to 40 microns.

Initial Operational Capability (IOC)

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 a trained, equipped, and supported military unit or force.

Initial Operational Test and Evaluation (IOT&E)

All operational test and evaluation conducted on production or production representative articles, to support the decision to proceed beyond low-rate initial production. It is conducted to provide a valid estimate of expected system operational effectiveness and operational suitability.

INMARSAT International Maritime Satellite (a UHF communications satellite).

INS 1. Internal Navigation System. 2. Insert code.

InSb See Indium Antimonide.

INSCOM U.S. Army Intelligence and Security Command.

INSICOM Integrated Special Intelligence Communications (Navy term).

INSURE Integrated Survivability Experiments.

Integ Integrated.

Integrated Logistics Support Plan (ILSP) The formal planning document for logistics support. It is kept current through the program life and sets forth the plan for operational support, provides a detailed ILS program to fit with the overall program, provides decision-making bodies with necessary ILS information to make sound decisions in system development and production, and provides the basis for ILS procurement packages/specifications RFPs, SOWs, source selection evaluation, terms and conditions, and CDRLs.

Integrated Contracting Report (ICR) A quarterly report of BMD contracts which defines the roles, relationships, and interfaces among contracts, contractors, and programs, and provides a mechanism for strengthening BMDO contracting oversight (formerly known as Integrated Contracting Plan or ICP).

Integrated Fire Control System A system which performs the functions of target acquisition, tracking, data computation, and engagement control, primarily using electronic means assisted by electromechanical devices.

Integrated Logistics Support (ILS) 1. A disciplined, unified, and iterative approach to the management and technical activities necessary to integrate support considerations into system and equipment design; develop support requirements that are related consistently to readiness objectives, to design, and to each other; acquire the required support; and provide the required support during the operational phase at minimum cost. 2. A composite of all the support considerations necessary to assure the effective and economical support of a system for its life cycle. It is an integral part of all other aspects of system acquisition and operation.

Integrated Logistics Support (ILS) Elements

- 1. Maintenance Planning. The process conducted to evolve and establish maintenance concepts and requirements for the lifetime of a materiel system.
- 2. Manpower and Personnel. The identification and acquisition of military and civilian personnel with the skills and grades required to operate and support a materiel system over its lifetime at peacetime and wartime rates.
- 3. Supply Support. All management actions, procedures, and techniques used to determine requirements to acquire, catalog, receive, store, transfer, issue, and dispose of secondary items. This includes provisioning for initial support as well as replenishment supply support.
- 4. Support Equipment. All equipment (mobile or fixed) required to support the operation and maintenance of a materiel system. This includes associated multi-use end items, ground-handling and maintenance equipment, tools, meteorology and calibration equipment, test equipment, and automatic test equipment. It includes the acquisition of logistics support for the support and test equipment itself.
- 5. Technical Data. Recorded information regardless of form or character (such as manuals and drawings) of a scientific or technical nature. Computer programs and related software are not technical data; documentation of computer programs and related software are. Also excluded are financial data or other information related to contract administration.
- 6. Training and Training Support. The processes, procedures, techniques, training devices, and equipment used to train civilian and active duty and reserve military personnel to operate and support a materiel system. This includes individual and crew training; new equipment training; initial, formal, and on-the-job training; and logistic support planning for training equipment and training device acquisitions and installations.
- 7. Computer Resources Support. The facilities, hardware, software, documentation, manpower, and personnel needed to operate and support embedded computer systems.
- 8. Facilities. The permanent, or semi-permanent, or temporary real property assets required to support the materiel system, including conducting studies to define types of facilities or facility improvements, locations, space needs, utilities, environmental requirements, real estate requirements, and equipment.
- 9. Packaging, Handling, Storage, and Transportation. The resources, processes, procedures, design considerations, and methods to ensure that all system, equipment, and support items are preserved, packaged, handled, and transported properly, including environmental considerations, equipment preservation requirements for short- and long-term storage, and transportability.
- 10. Design Interface. The relationship of logistics-related design parameters, such as reliability and maintainability, to readiness and support resource requirements. These logistics-related design parameters are expressed in operational terms rather than inherent values and specifically related to system readiness objectives and support costs of the materiel system.

Integrated Priority List

A list of a combatant commander's highest priority requirements, prioritized across Service and functional lines. The list defines shortfalls in key programs that, in the judgment of the combatant commander, adversely affect the capability of the his forces to accomplish their assigned mission. The integrated priority list provides the combatant commander's recommendations for programming funds in the Planning, Programming, and Budgeting System process. Also called IPL.

Integrated Program Assessment (IPA)

A document prepared by the supporting staff or review forum of the milestone decision authority to support Milestone I, II, III, and IV reviews. It provides an independent assessment of a program's status and readiness to proceed into the next phase of the acquisition cycle.

Integrated Program Summary (IPS) A DoD Component document prepared and submitted to the milestone decision authority in support of Milestone I, II, III, and IV reviews. It succinctly highlights the status of a program and its readiness to proceed into the next phase of the acquisition cycle.

Integrated Tactical Warning and Attack Assessment (ITW/AA) ITW/AA is the integration of ballistic missile warning, space warning, and atmospheric warning with intelligence information for synthesis of all attack warning information, strategic and tactical.

Integrated Warfare

The conduct of a military operation in any combat environment wherein opposing forces employ non-conventional weapons in combination with conventional weapons.

Integration

1. The combination of separate systems, capabilities, functions, etc. in such a way that individual elements can operate singly or in concert without adversely affecting other elements. (USSPACECOM) 2. Act of putting together as the final end item various components of a system.

INTEL

Intelligence.

Intelligence

1. The product, resulting from the collection, evaluation, analysis, integration and interpretation of all available information concerning foreign countries or areas. 2. Information and knowledge about an adversary obtained through observation, investigation, analysis, or understanding.

Intelligence Report (INTREP)

A specific report of information usually on a single item, made at any level of command in tactical operations and disseminated as rapidly as possible in keeping with the timeliness of the information.

Intelligence Threat

An identification of known and potential adversary capabilities to collect and exploit information from a given or similar operation.

Intelligence Indicators

Classified or unclassified actions or information obtainable by an adversary that, when properly interpreted, can provide information about friendly capabilities and intentions.

Intelligence Operations Center (IOC)

An organization term for all intelligence activities in Cheyenne Mountain AFB. The IOC includes the Consolidated Intelligence Watch (CIW), Operational Intelligence Elements, and the Joint SPACECOM Intelligence Center (JSIC) Cheyenne Mountain Node (JCTN).

Intelligence Preparation of the Battlespace

An analytical methodology employed to reduce uncertainties concerning the enemy, environment, and terrain for all types of operations. Intelligence preparation of the battlespace builds an extensive data base for each potential area in which a unit may be required to operate. The data base is then analyzed in detail to determine the impact of the enemy, environment, and terrain on operations and presents it in graphic form. Intelligence preparation of the battlespace is a continuing process. Also called IPB.

Intensity

The amount of energy of any radiation incident upon (or flowing through) unit area, perpendicular to the radiation beam, in unit time. The intensity of thermal radiation is generally expressed in calories per square centimeter per second falling on a given surface at any specific instant. As applied to nuclear radiation, the term intensity is sometimes used, rather loosely, to express the exposure (or dose) rate at a given location.

Interactive Responses

Interactive response data on tracked objects to assist in their classification.

Interceptor Cluster

A group of objects which are within divert capability of a deployed interceptor.

Interceptor Track

A function or ability of a sensor to accurately detail an interceptor's position and velocity in three dimensions.

Interceptor Track Range (Max)

The maximum range at which a sensor can perform the interceptor track function on a single interceptor in a normal (non-man-made) environment.

Interchangeability

A condition which exists when two or more items possess such functional and physical characteristics as to be equivalent in performance and durability, and are capable of being exchanged one for the other without alteration of the items themselves or of adjoining items, except for adjustment, and without selection for fit and performance.

Interconnection

The linking together of interoperable systems.

Intercontinental Ballistic Missile (ICBM)

A ballistic missile with a range from about 3,000 to 8,000 nautical miles. The term ICBM is used only for land-based systems to differentiate them from submarine-launched ballistic missiles. (See SLBM.)

Interface

1. A shared boundary defined by common physical interconnection characteristics, signal characteristics, and meanings of interchanged signals. 2. A device or equipment making possible interoperation between two systems, e.g., a hardware component or a common storage register. 3. A shared logical boundary between two software components. 4. A common boundary or connection between persons, or between systems, or between persons and systems.

Interface Control Document (ICD)

The technical documentation, generated by each party to an interface control agreement, that presents that party's interface and interfacing requirements. The ICD may be in the form of a drawing or a specification.

Interface Requirements Document (IRD)

A document that sets forth the interface requirements for a system or system component.

Interference

The phenomenon of two or more waves of the same frequency combining to form a wave in which the disturbance at any point is the algebraic or vector sum of the disturbances due to the interfering waves at that point.

Intermediate Range Ballistic Missile (IRBM)

A ballistic missile having a range capability of 1,500 to 3,000 nautical miles.

International Agreement Generator (IAG)

Software system managed by OSD which must be used to author DoD International Agreements.

International Cooperative Logistics

Cooperation and mutual support in the field of logistics through the coordination of policies, plans, procedures, development activities, and the common supply and exchange of goods and services arranged on the basis of bilateral and multilateral agreements with appropriate cost reimbursement provisions.

International Logistic Support

The provision of military logistic support by one participating nation to one or more participating nations, either with or without reimbursement.

International Logistics

The negotiating, planning, and implementation of supporting logistics arrangements between nations, their forces, and agencies. It includes furnishing logistic support to, or receiving logistic support from, one or more friendly foreign governments, international organizations, or military forces, with or without reimbursement. It also includes planning and actions related to the intermeshing of a significant element, activity, or component of the military logistics systems or procedures of the United States with those of one or more foreign governments, international organizations, or military forces on a temporary or permanent basis. It includes planning and actions related to the utilization of United States logistics policies, systems, and/or procedures to meet requirements of one or more foreign governments, international organizations, or forces.

Interoperability

The ability of systems, units, or forces to provide services to or accept services from other systems, units, or forces and to use the services so exchanged to operate effectively together.

INTERPOL

International Criminal Police Organization.

INTLCT

Integrated Electronics.

Intruder Operation

An offensive operation by day or night over enemy territory with the primary object of destroying enemy aircraft in the vicinity of their bases.

INU

Inertial Navigation Unit.

Inventory Control Point

An organizational unit or activity within a DoD supply system that is assigned the primary responsibility for the materiel management of a group or items either for a particular Service or for the DoD as a whole. Materiel inventory management includes cataloging direction, requirements computation, procurement direction, distribution management, disposal direction, and, generally, rebuild direction.

Inverse Square Law

The law that states when thermal or nuclear radiation is uniformly emitted from a point source, the amount received per unit area at any given distance from the source, assuming no absorption, is inversely proportional to the square of that distance.

Inverse Synthetic Aperture Radar (ISAR)

A type of radar similar to a synthetic aperture radar, which uses information from the motion of targets to provide high resolution.

Ю

1. Information Operations. 2. Integrated Optic.

IOC

1. See Initial Operational Capability. 2. See Intelligence Operations Center. 3. Integrated Optics Chip.

IOM

Inert Operational Missile.

IONDS

Integrated Operational Nuclear Detonation Detection System (US).

Ionization

The process of producing ions by the removal of electrons from, or the addition of electrons to atoms or molecules.

Ionizing Radiation

Electromagnetic radiation (gamma rays, x-rays, extreme ultraviolet (EUV)) or particulate radiation (alpha particles, beta particles, neutrons, etc.) capable of producing ions, e.g., electrically charged particles, directly or indirectly, in its passage through matter. (See Nuclear Radiation.)

Ionosphere The region of the atmosphere, extending from roughly 70 to 500 kilometers altitude, in

which ions and free electrons exist in sufficient quantities to reflect electromagnetic

waves.

IOSS Interagency OPSEC Support Staff.

IOT&E See Initial Operational Test and Evaluation.

IOU Input/Output Unit.

IP 1. Instructor Pilot. 2. Initial Point. 3. Initial Position. 4. Internet Protocol.

5. Interconnect Protocol.

IPA See Integrated Program Assessment.

IPB Intelligence Preparation of the Battlefield or Battlespace.

IPC Information Policy Committee.

IPD Integrated Product (Process) Development.

IPE Industrial Plant Equipment.

IPF Initial Production Facility.

IPL Integrated Priority List.

IPM Integration Program Manager.

IPMI Integration Program Management Initiative.

IPP 1. See Impact Point Prediction. 2. Industrial Preparedness Program.

IPPD Integrated Process and Product Development.

IPR 1. See In-Process Review (Also called In-Progress Review).

2. Intelligence Production Requirement.

IPRR Initial Production Readiness Review

IPRWG Intellectual Property Rights Working Group.

IPS 1. See Integrated Program Summary. 2. Improved Propulsion Summary.

IPSRU Inertial Pseudo-Star Reference Unit.

IPT 1. Integrated Product Team. 2. Integrated Process Team.

3. Integrated Planning Team.

IQT Initial Qualification Training (ILS term).

IR 1. See Infrared. 2. Information Requirement. 3. Incident Report.

4. Information Rate. 5. Initial Review (NMD BMC3 term). 6. Isotope Reactor.

IR Electro-Optics Technologies/techniques employed by optical sensors in the wavelength spectrum

slightly longer than visible but shorter than radio.

IR&D Independent Research and Development. (Also called IRAD).

IR/Vis Infrared Visual.

IRA See Industrial Resource Analysis.

IRAD Independent Research and Development.

IRAS Infrared Astronomical Satellite.

IRBM See Intermediate Range Ballistic Missile.

IRBS 1. Infrared Background Sensor. 2. Intermediate-Range Booster System.

IRCM Infrared Countermeasures.

IRD See Interface Requirements Document.

IRFP International Request for Proposals (Contracting term).

IRFPA Infrared Focal Plane Array.

IRG Independent Review Group.

IRIA Infrared Information Analysis Center.

IRIG Inter-Range Instrumentation Group.

IRINT Infrared Intelligence.

IRIS Infrared Instrumentation System.

IRLA Item Repair Level Analysis (ILS term).

IRM Information Resources Management.

IRMAC Information Resource Management Advisory Committee.

IRMC Information Resources Management College.

IRR 1. Internal Requirements Review. 2. Interface Requirements Review.

IRRAS Integrated Reliability and Risk Analysis System.

IRRS Information Resources Requirements Study.

IRS Interface Requirements Specification.

IRSS Infrared Sensor System (EAGLE).

IRST 1. Infrared Search and Track. 2. Infrared Sensor and Tracker.

IRTF Internet Research Task Force.

IS 1. See Information System. 2. Information Specialist. 3. Interstage Package.

IS&T 1. Invite, Show and Test. 2. Innovative Science and Technology.

3. Integrated Science & Technology.

ISA 1. Interservice Agreement. 2. Industry Standard Architecture.

3. Interservice Support Agreement.

ISAR See Inverse Synthetic Aperture Radar.

ISAS Institute of Space and Astronautical Science (Japan).

ISC 1. Information Systems Command. 2. Irvine Sensors Corporation.

ISDN Integrated Services Digital Network.

ISE Integrated SATKA Experiments.

ISE Integrated Space Experiment.

ISE&I Israeli System Engineering and Integration.

ISG Industry Support Group.

ISM 1. Industrial Security Manual. 2. Integrated Structures Model.

ISMG International Simulation & Modeling Group.

ISMO Information Security Management Office.

ISO International Standards Organization.

ISOO Information Security Oversight Office.

Isotropic Independent of direction; referring to the radiation of energy, it means "with equal

intensity in all directions" (e.g., omnidirectional).

Isotropic

Nuclear Weapon

A nuclear explosive which radiates x-rays and other forms of radiation with approximately equal intensity in all directions. The term "isotropic" is used to

distinguish them from nuclear directed energy weapons.

ISP 1. Integrated Support Plan. 2. Industrial Security Program.

ISR Intelligence, Surveillance, and Reconnaissance.

ISS 1. Information System Security. 2. Infrared Surveillance System.

ISSA Information Systems Security Association.

ISSAA Information Systems and Software Acquisition Agency.

ISSC Information Systems Security Committee.

ISSM Information System Security Manager.

ISSO Information System Security Officer.

ISSSTA International Symposium on Spread Spectrum Techniques and Applications.

Issue Cycle A process followed during OSD review of the POM. It begins in early June and extends

into July.

Issue Papers OSD documents defining issues raised during review of the POM.

IST 1. Innovative Science and Technology. 2. Integrated System Test.

ISTC Integrated System Test Capability.

ISTEF Innovative Science and Technology Experiment Facility.

ISTF Installed System Test Facility.

ISV Interceptor Sensor Vehicle.

ISWG Integration Support Working Group.

IT Information Technology.

ITAC Intelligence Threat Analysis Center.

ITAR International Traffic in Arms Regulations.

ITB 1. Integrated Test Bed. 2. Israeli Test Bed.

ITCE International Cooperative Experiment.

ITD Integration Technology Demonstration

ITDAP 1. Integrated Test Data Analysis Plan.

2. Integrated Test Design and Assessment Plan.

Item Manager An individual within the organization of an inventory control point or other such

organization assigned management responsibilities for one or more specific items of

materiel.

ITERS Improved Tactical Events Reporting System.

ITL Integrate, Transfer, Launch

ITMSC Information Technology Management Systems Council.

ITMT Integrated Technical Management Team.

ITO Instructions-to-Offerers (FAR term).

ITP Integrated Test Plan.

ITPB Information Technology Policy Board.

ITR Information Technology Resources.

ITS Information Technology Service.

ITSD Information Technology Services Directorate.

ITT ITT Corporation.

ITV 1. Integrated Technology Validation. 2. Instrumented Test Vehicle

ITW Integrated Tactical Warning.

ITW/AA See Integrated Tactical Warning and Attack Assessment.

IUI Integrated User Interface.

IV Interceptor Vehicle

IV&V See Independent Verification and Validation.

IVHS Intelligent Vehicle Highway System.

IVIS Inter-Vehicular Information System (USA term).

IW Information Warfare.

IWCD Integrated Wavefront Control Demonstration.

IWEB Information Warfare Executive Board.

IWG Interagency Working Group.

IWS Indications and Warning System.

IWSM Integrated weapons system management.

IXS Information Exchange System.

J&A Justification and Approval.

J-SEAD See Joint Suppression of Enemy Air Defenses.

JAAT Joint Air Attack Team.

JADO Joint Air Defense Operations.

JAE Joint Acquisition Executive.

JAIC Joint Air Intelligence Center (JFACC term).

JAMES Joint Automated Message Editing System (USN term).

Jammers Radio transmitters accompanying attacking RVs and tuned to broadcast at the same

frequency as a defensive radar. The broadcasts add "noise" to the signals reflected from the RVs and received by the radar. Susceptibility to jamming generally decreases with increasing radar frequency, with decreasing altitude, and with increasing radar power.

JAO Joint Area of Operations.

JAOC Joint Air Operations Center (JFACC term).

JASSAM Joint Air-to-Surface Standoff Missile (USAF term).

JAST Joint Advanced Strike Aircraft (USAF/USN program).

JBS Joint Broadcast Service (ASD(C3I) term).

JCAE Joint Committee on Atomic Energy (US).

JCEOI Joint Communications-Electronics Operation Instructions.

JCM Joint Conflict Model.

JCS Joint Chiefs of Staff (US).

JCSM Joint Chiefs of Staff Memorandum.

JCTN Joint Composite Tracking Network.

JDA 1. Japan Defense Agency. 2. Joint Duty Assignment.

JDAM Joint Direct Attack Munitions (USAF B1-B weapon).

JDC 1. Joint Doctrine Center. 2. Joint Deployment Community.

JDISS Joint Deployable Intelligence Support System.

JDN Joint Data Net.

JEA Joint Effectiveness Analysis (formerly COEA).

JEC Joint Economic Committee (US).

JEIO Joint Engineering and Integration Office.

JEM Joint Exercise Manual.

JETTA Joint Environment for Testing, Training, and Analysis.

JEWC See Joint Electronic Warfare Center.

JEZ Joint Engagement Zone.

JFCC Joint Forces Command Center.

JFET Junction Field Effect Transistor.

JFFC Joint Forces [Weapons] Fire Coordinator (JFACC term).

JFLC Joint Force Land Component.

JFMC Joint Forces Maritime Component.

JFSOC Joint Forces Special Operations Component.

JG-APP Joint Group on Acquisition Pollution Prevention.

JHU Johns Hopkins University, Baltimore, MD

JHU/APL Johns Hopkins University/Applied Physics Laboratory, Laurel, MD.

JIC 1. Joint Intelligence Center. 2. Jet Interaction Controls.

JICPAC Joint Intelligence Center, Pacific (JFACC term).

JIEO Joint Interoperability and Engineering Organization.

JINTACCS Joint Interoperability of Tactical Command and Control Systems.

JIOP Joint Interface Operational Procedures.

JIOP-MTF Joint Interface Operational Procedures - Message Text Forms.

JIOPTL Joint Integrated Prioritized Target List (JFACC term).

JITC Joint Interoperability Test Center, a subordinate command of DISA lated at Fort

Huachuca, AZ.

JLC Joint Logistics Commanders.

JLOTS Joint Logistics Over-The-Shore.

JM&S Joint Modeling and Simulation.

JMC 1. Joint Movement Center. 2. Joint Military Command.

JMCCOC Joint MILSTAR Communications Control and Operations Concept.

JMCIS 1. Joint Maritime Command (Combat) Information System (USN).

2. Joint Maritime Collaborative Information System.

JMDN Joint Missile Defense Network. Encompasses all mission-oriented Information

Technology Resources (ITR) networks, facilities and systems operated or funded by BMDO in support of missile defense programs and operations. A major component of the JMDN is the Ballistic Missile Defense Network (BMDN), operated by the JNTF.

JMEM Joint Munitions Effectiveness Manual.

JMENS Joint Mission Element Needs Statement.

JMNS Joint Mission Needs Statement.

JMO Joint Maritime Operations.

JMSNS Justification for Major Systems New Start.

JMSWG 1. Joint Multi-TADIL Standards Working Group. 2. Joint Interoperability Message

Standards Working Group.

JNAAS JNTF Advisory and Assistance Service.

JNESSY JNTF Electronic Security System.

JNTF See Joint National Test Facility.

JNTFOMC Joint National Test Facility Operations and Maintenance Contractor.

JNTFRDC Joint National Test Facility Research and Development Contractor.

JNTFUSLA Joint National Test Facility Unclassified Standalone and Laptop Access.

JOB 1. Joint Operations Board. 2. Joint Oversight Board.

JOC 1. Joint Oversight Council. 2. Joint Operations Center.

JOCAS Job Order Cost Accounting System.

Joint Activities, operations, organizations, etc., in which elements of more than one Service

of the same nation participate. When all services are not involved, the participating

Services shall be identified, e.g., Joint Army-Navy.)

Joint Doctrine Fundamental principles that guide the employment of forces of two or more Services in

coordinated action toward a common objective. It will be promulgated by the Chairman of the Joint Chiefs of Staff, in coordination with the combatant commands, Services,

and Joint Staff. See also Chairman, Joint Chiefs of Staff.

Joint Doctrine A forum to include representatives of the Services and combatant commands with the Working Party purpose of systematic addressal of joint doctrine and joint tactics, techniques, and

purpose of systematic addressal of joint doctrine and joint tactics, techniques, and procedures (JTTP) issues such as project proposal examination, project scope development, project validation, and lead agent recommendation. The Joint Doctrine Working Party meets under the sponsorship of the Director, Operations Plans and

Interoperability.

Joint Electronic Warfare Center (JEWC) Electronic Security Command (ESC) team at Kelly AFB, TX, responsible for investigating and locating the cause of MIJI either against satellites or ground systems.

Joint Force

A general term applied to a force composed of significant elements, assigned or attached, of the Army, the Navy or Marine Corps, and the Air Force, or two or more of these Services, operating under a single commander authorized to exercise operational control. See also Joint Force Commander.

Joint Force Air Component Commander (JFACC) The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of air forces, planning and coordinating air operations, or accomplishing such operational missions as may be assigned. The joint force air component commander is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. The JFACC will normally be the commander with the preponderance of air forces and the requisite command and control capabilities.

Joint Force Commander (JFC) A general term applied to a commander authorized to exercise combatant command (command authority) or operational control over a joint force. Also called JFC.

Joint Force Land Component Commander (JFLCC) The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of land forces, planning and coordinating land operations, or accomplishing such operational missions as may be assigned. The joint force land component commander is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. The JFLCC will normally be the commander with the preponderance of land forces and the requisite command and control capabilities.

Joint Force Special Operations Component Commander (JFSOCC) The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of special operations forces and assets, planning and coordinating maritime operations, or accomplishing such operational missions as may be assigned. The JFSOCC is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. The JFSOCC will normally be the commander with the preponderance of special operations forces and the requisite command and control capabilities.

Joint National Test Facility (JNTF) A large, modeling, simulation and test facility located on Falcon AFB in Colorado which serves as the central control, coordinating, and computing center for the NTB and as the primary integration and test facility of the BMD SE&I contractor. (Former NTF)

Joint Operating Procedures (JOPs)

These documents identify and describe detailed procedures and interactions necessary to carry out significant aspects of a joint program. Subjects for JOPs may include Systems Engineering, Personnel Staffing, Reliability, Survivability, Vulnerability, Maintainability, Production, Management Controls and Reporting, Financial Control, Test and Evaluation, Training, Logistics Support, Procurement and Deployment. The JOPs are developed and negotiated by the Program Manger and the participating Services.

Joint Operational Planning and Execution System (JOPES) A continuously evolving system that is being developed through the integration and enhancement of earlier planning and execution systems: Joint Operation Planning System and Joint Deployment System. It provides the foundation for conventional command and control by national and theater level commanders and their staffs. It is designed to satisfy their informational needs in the conduct of joint planning and operations. JOPES includes joint operation planning policies, procedures, and reporting structures supported by communications and automated data processing systems. JOPES is used to monitor, plan, and execute mobilization, deployment, employment, and sustainment activities associated with joint operations.

Joint Operations Area

That area of conflict in which a joint force commander conducts military operations pursuant to an assigned mission and the administration incident to such military operations. Also called JOA.

Joint Program

Any defense acquisition system, subsystem, component, or technology program that involves formal management or funding by more than one DoD Component during any phase of a system's life-cycle.

Joint Requirements Oversight Council (JROC)

A council, chaired by the Vice Chairman, Joint Chiefs of Staff, that conducts requirements analyses, determines the validity of mission needs and develops recommended joint priorities for those needs it approves, and validates performance objectives and thresholds in support of the Defense Acquisition Board. Council members include the Vice Chiefs of the Army, Navy, and Air Force, and the Assistant Commandant of the Marine Corps.

Joint SPACECOM Intelligence Center (JSIC)

A USSPACECOM Intelligence Center responsible for producing operational intelligence for USSPACECOM missions and for space intelligence production for the DoD and intelligence community. Delegated Space Intelligence production includes: Space Order of Battle (OB), Space Object Identification (SOI), and Satellite Reconnaissance Advance Notices (SATRAN). Located at CMAFB.

Joint Strategic Defense Planning Staff (JOSDEPS)

A special staff located at USSPACECOM Headquarters responsible for integrated strategic defense planning and for integration of strategic defensive and strategic offensive operations. The USCINCSPACE serves as Director, Joint Strategic Defense Planning Staff.

Joint Strategic Target Planning Staff (JSTPS)

A JCS organization located at Offutt AFB responsible for planning, developing, coordinating, and producing the Single Integrated Operations Plans (SIOP). Also responsible for producing the National Strategic Target List (NSTL). The Commander in Chief, USSTRATCOM is also the Director, Joint Strategic Target Planning Staff.

Joint Suppression of Enemy Air Defense

A broad term that includes all suppression of enemy air defenses activities provided by one component of the joint force in support of another. Also called J-SEAD.

Joint Tactical Information Distribution System (JTIDS)

A joint service, jam-resistant, secure communications system that permits the interchange of essential tactical information between aircraft, surface vessels, and mobile or fixed-base land stations.

Joint Tactics, Techniques, and Procedures (JTTP)

The actions and methods which implement joint doctrine and describe how forces will be employed in joint operations. They will be promulgated by the Chairman, Joint Chiefs of Staff, in coordination with the combatant commands, Services and Joint Staff. Also called JTTP.

Joint Test and Evaluation

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.

Joint Test and Evaluation Program

An OSD program for Joint T&E, structured to evaluate or provide information on system performance, technical concepts, system requirements or improvements, systems interoperability, improving or developing testing methodologies, or for force structure planning, doctrine, or procedures.

JON Job Order Number.

JOP Joint Operating Procedures.

JOPES See Joint Operational Planning and Execution System.

JOPS Joint Operations Planning System.

JOR Joint Operational Requirements.

JORD Joint Operational Requirements Document.

JOSDEPS See Joint Strategic Defense Planning Staff.

JOSS JTF Operational Support System (JIEO term).

JOTS Joint Operational Tactical System (USN term)

JP Joint Publication.

JPL Jet Propulsion Laboratory, Pasadena, CA.

JPM Joint Program Manager.

JPN Joint Planning Net.

JPO Joint Program Office.

JPOC Joint Program Optic Cobra.

JPOI Joint Project -- Ornate Impact

JPON Joint Project -- Optic Needle.

JPRN Joint Precision Reporting Net.

JPSD Joint Precision Strike Demonstration.

JPT Joint Planning Tool.

JRB Joint Review Board (JROC term).

JRC Joint Reconnaissance Coordinator (JFACC term)

JRCC Joint Rescue Coordination Center (JFTF term).

JRMB Joint Resources Management Board.

JROC See Joint Requirements Oversight Council.

JROC SSG JROC Strategic Systems Group.

JRSC Jam Resistant Secure Communications.

JRTC Joint Readiness Training Center.

JS Joint Staff.

JS&MDWC Joint Space and Missile Defense Warfare Center.

JSC 1. Joint Security Commission. 2. Joint Steering Committee (French/US term).

JSCP Joint Strategic Capabilities Plan.

JSEAD Joint Suppression of Enemy Air Defenses (Joint Forces term).

JSET 1. Joint System Engineering Team (BMDO/USN term).

2. Joint Service Evaluation team.

JSF Joint Strike Fighter (USAF, USN, USMC, UK RAF project).

JSIC See Joint SPACECOM Intelligence Center.

JSIPS Joint Service Imagery Processing System (TelComms/Computer term).

JSMB Joint Space Management Board.

JSOC Joint Special Operations Command.

JSOR Joint Services Operating Requirement.

JSPD Joint Strategic Planning Document.

JSPS Joint Strategic Planning System.

JSS Joint Surveillance System.

JSST Joint Space Support Team.

JSTARS 1. Joint Surveillance and Target Acquisition Radar System.

2. Joint Surveillance Tracking and Reporting System.

JSTPS See Joint Strategic Target Planning Staff.

JT&E Joint Test and Evaluation.

JTA Joint Technical Architecture (JCS term).

JTAGS Joint Tactical Ground Station.

JTAMDO Joint Theater Air and Missile Defense Organization.

JTASC Joint Training Analysis and Simulation Center.

JTB JFACC (Afloat) Targeting Board (JFACC term).

JTBP Joint Theater Battle Picture.

JTCB Joint Targeting Coordination Board (JFACC term)

JTE Joint Targeting Element (JFACC term).

JTF Joint Task Force.

JTFEX Joint Task Force Exercise.

JTIDS See Joint Tactical Information Distribution System.

JTL Joint Target List.

JTMD Joint Theater Missile Defense.

JTMDP Joint Theater Missile Defense Plan.

JTOC Joint Targets Oversight Council.

JTPO Joint Terminal Project Office [of MILSTAR Comms Sys].

JTR Joint Travel Regulations.

JTRP Joint Telecommunication Resources Board.

JTSG Joint Targeting Steering Group (JFACC term).

JTT Joint Tactical Terminal.

JTTP Joint Tactics, Techniques, and Procedures.

JVX Joint Services Advanced Vertical Lift Aircraft.

JWAN Joint Wide Area Net.

JWARS Joint Warfighting System (computer model).

JWC Joint Warfare Center.

JWCA Joint Warfighting Capability and Assessment.

JWFC Joint Warfighting Center.

JWG Joint Working Group.

JWICS Joint Worldwide Intelligence Communications Network.

JWID Joint Warrior Interoperability Demonstration.

JWSTP Joint Warfighting Science and Technology Plan.

K 1. Kelvin. 2. Kilo.

K Factor The relative measure of a sensor's ability to distinguish one object from another.

Theoretically (but not in practice) it is the distance between the mean locations of two observed objects given normal distributions and standard deviations for both objects.

KA See Kill Assessment.

KAPP Key Asset Protection Program.

KB Kilobyte.

Kbps Kilobytes per second.

KBS Knowledge Based System (UKMOD).

KBSF Knowledge Based Sensor Fusion.

KDEC Kinetic Energy Weapon Digital Emulation Center, Huntsville, AL.

KDS Kwajalein Discrimination System.

KE See Kinetic Energy.

KE ASAT Kinetic Energy Anti-Satellite Weapon.

KED Kill Enhancement Device.

Keep-Out Zone A volume around a space asset, which is off limits to parties not owners of the asset.

Keep-out zones could be negotiated or unilaterally declared. The right to defend such a zone by force and the legality of unilaterally declared zones under the Outer Space

Treaty remain to be determined.

KEI Kinetic Energy Intercept.

KENN Statistical pattern recognition tool.

KEV Kinetic Energy Vehicle.

KEW See Kinetic Energy Weapon.

KEWC Kinetic Energy Weapon, Chemical (propulsion).

KEWE Kinetic Energy Weapon, Electromagnetic (propulsion).

KEWG Kinetic Energy Weapon, Ground.

KEWO Kinetic Energy Weapon, Orbital.

Key A type of dataset used for encryption or decryption. In cryptography, a sequence of

symbols that controls the operations of encryption and decryption.

kg Kilogram.

KHILS Kinetic Kill Vehicle Hardware in-the-Loop Simulator, Eglin AFB, FL.

KHIT Kinetic Kill Vehicle Hardware Integrated Test.

KIDD Kinetic Impact Debris Distribution.

Kill Assessment

(KA)

An evaluation of information to determine the result of a ballistic missile/RV intercept for the purpose of providing information for defense effectiveness and re-engagements.

(USSPACECOM)

Kill Enhancement

Device

A device that improves an interceptor's lethality.

Kinematic Battlespace The planned engagement region in space of an interceptor given the sensor timeline, kinematic capabilities of the interceptor, engagement timeline, and operational

constraints.

Kinetic Energy

(KE)

The energy from the momentum of an object, i.e., an object in motion.

Kinetic Energy Weapon (KEW) A weapon that uses kinetic energy, or energy of motion to kill an object. Examples of weapons which use kinetic energy are a rock, a bullet, a nonexplosively armed rocket,

and an electromagnetic rail gun.

Kinetic Kill Vehicle (KKV) A weapon using a non-explosive projectile moving at very high speed to destroy a target on impact. The projectile may include homing sensors and on-board rockets to improve its accuracy, or it may follow a preset trajectory (as with a shell launched from a gun).

Kinetic Kill Vehicle Integrated Technology Experiment (KITE) A series of test flights at WSMR to demonstrate HEDI technologies.

KITE1. Kuiper Infrared Technology Experiment. 2. See Kinetic Kill Vehicle Integrated

Technology Experiment.

KKV See Kinetic Kill Vehicle.

KKVWS Kinetic Kill Vehicle Weapon System.

KL Kill Level.

km Kilometer.

km/h Kilometer per Hour.

km/sec Kilometer per Second.

KMCC Kwajalein Mission Control Center, United States Army Kwajalein Atoll (USAKA),

Republic of the Marshall Islands (RMI).

KMR Kwajalein Missile Range, United States Army Kwajalein Atoll, Republic of the

Marshall Islands (RMI).

KMRSS Kwajalein Missile Range Safety System.

KPP Key Performance Parameters.

Kr Krypton.

KREMS Kiernan Reentry Measurement System.

KSC Kennedy Space Center, FL.

Kt Kiloton.

KTF Kauai Test Facility, Barking Sands, HI.

KTP 1. Key Technical Partner. 2. Key Test Partner 3. Key Technical Parameters.

kts Knots.

KV Kill Vehicle.

kw Kilowatt.

KW Kinetic Warhead.

L&TH Lethality and Target Hardening.

L1SS Level 1 System Simulator.

L2SS Level 2 System Simulator (JNTF).

LAA Limited Access Area.

LAAD Low Altitude Air Defense.

LAAFB Los Angeles AFB, CA.

LABCOM Laboratory Command, Adelphi, MD (Ex-ERADCOM) (USA term).

LABM Local Area Battle Manager.

LABP Look Ahead Battle Planner

LAC Low Authority Control.

LACE Laser Atmospheric Compensation Experiment (an SDIO/NRL satellite launched

February 1990 and turned off July 1993).

LACM Land Attack Cruise Missile.

LADAR See Laser Detection and Ranging.

Laddering Down A hypothetical technique for overcoming a terminal phase missile defense. Successive

salvos of salvage-fused RVs attack. The detonations of one salvo disable local ABM abilities so that following salvos are able to approach the target more closely before being, in turn, intercepted. Eventually, by repeating the process, the target is reached

and destroyed.

LADL Lightweight Air Defense Launcher (USA TBMD term).

LADS See Low Altitude Demonstation System.

LAFB Langley AFB, VA.

LAMP Large Advanced Mirror Program.

LAN Local Area Network.

Landsat Land Satellite (NASA program's satellite).

LANL Los Alamos National Laboratory, NM.

LANTIRNS Low Altitude Navigation and Targeting Infrared Night System.

LAO Limited Attack Option.

LAPL Lead Allowance Parts List (Navy term).

LARC Langley Research Center, Hampton, VA.

Large Optics

The technology of constructing and employing mirrors over 1 m aperture to direct and control high power beam weapons/systems with large coverage, or to provide high resolution or high sensitivity for detection and/or imaging.

LASA

Large Aperture Seismic Array.

Lasant

A material that can be stimulated to produce laser light. Many materials can be used as lasants; these can be in solid, liquid, or gaseous form (consisting of molecules including excimers or atoms) or in the form of a plasma (consisting of ions and electrons). Lasant materials useful in high energy lasers include carbon dioxide, carbon monoxide, deuterium fluoride, hydrogen fluoride, iodine, xenon chloride, krypton fluoride, and selenium, to mention but a few.

LASE

LIDAR Acquisition and Sizing Experiment.

Laser

An active electron device that converts input power into a very narrow, intense beam of coherent visible or infrared light; the input power excites the atoms of an optical resonator to a higher energy level, and the resonator forces the excited atoms to radiate in phase. Derived from Light Amplification by Stimulated Emission of Radiation and classified from Class I - Class IV according to its potential for causing damage to the eye.

Laser Designator

A device that emits a beam of laser energy to mark a specific place or object.

Laser Detection and Ranging (LADAR) A technique analogous to radar, but which uses laser light rather than radio or microwaves. The light is bounced off a target and then detected, with the return beam providing information on the distance and velocity of the target.

Laser Guided Weapon A weapon that uses a seeker to detect laser energy reflected from a laser marker/designated target and, through signal processing, provides guidance commands to a control system. The control system then guides the weapon to the point from which the laser energy is being reflected.

Laser Imaging Radar A technology whereby a laser beam can be used in a way similar to the use of a radar beam to produce a high-quality image of an object.

Laser Optics

Technology associated with the use and control of laser beams with flux greater than 1 watt/cm^2 .

Laser Seeker

A device based on a direction sensitive receiver that detects the energy reflected from a laser designated target and defines the direction of the target relative to the receiver. See also laser guided weapon.

Laser Target Designating System A system that is used to direct (aim or point) laser energy at a target. The system consists of the laser designator or laser target marker with its display and control components necessary to acquire the target and direct the beam of the laser energy thereon.

Laser Tracker

A device that locks on to the reflected energy from a laser marked/designated and defines the direction of the target relative to itself.

Laser Weapons

Devices, such as photon generators, that produce a narrow beam of coherent radiated power greater than 1 MW.

LASERCOM

Laser Communications.

LATS

Long Wave Infrared Advanced Technology Seeker/Sensor.

Launch Azimuth Missile launch location measured in degrees clockwise from the local north-pointing

longitude line at the launch site. (USSPACECOM)

Launch Detection Initial indication by any one of a variety of sensors that a booster has been launched

from some point on the surface of the earth, with initial characterization of the booster

type. (USSPACECOM)

Launch Point Determination

With computer methods, uses missile track observation to estimate the point on the earth's surface from which the missile was launched, expressed in terms of circular error

probable.

Launch Under Attack (LUA) Execution by National Command Authorities of Single Integrated Operational Plan forces subsequent to tactical warning of strategic nuclear attack against the United

States and prior to first impact.

Launch Verification Confirmation of a detection of a booster launch by receiving a report from a sensor separate and independent of the sensor that initially detected a specific booster launch.

Layered Defense A defense that consists of several sets of weapons that operate at different phases in the

trajectory of a ballistic missile. Thus, there could be a first layer (e.g., boost phase) of defense with remaining targets passed on to succeeding layers (e.g., midcourse,

terminal).

lb Pound.

LBL Lawrence Berkeley Laboratory, Berkeley, CA.

LBM Localized Battle Management/Manager(s).

LBTS Land Based Test Site.

LCC 1. See Life-Cycle Cost. 2. Launch Control Center.

3. Land Component Commander (JCS term).

LCCE Life Cycle Cost Estimate.

LCCS Life-Cycle Contractor Support.

LCF Launch Control Facility.

LCM 1. Life Cycle Management.

2. Lightweight Communications Module (USAF TelComms/ Computer term).

LCN Logistics Control Number (ILS term).

LCOM Logistics Composite Model.

LCS 1. Laser Crosslink System. 2. Launch Control Station (USA term).

3. Loral Communications System.

LDC Less Developed Country.

LDEF Long Duration Exposure Facility (NASA).

LDR Low Data Rate.

LDS 1. Layered Defense System. 2. Lexington Discrimination System. 3. Limited Defense

System.

LE Lethality Enhancer (PAC-3).

Lead Component/

Service

The DoD Component designated by SECDEF to be responsible for management of a

system acquisition involving two or more DoD Components in a joint program.

LEAF Law Enforcement Access Field.

Leakage The allowable threat objects passing through a BMD system expressed as a percentage

of the threat. To ensure overall system performance, permitted leakage is "budgeted"

among individual BMD phases and functions.

Leakage (Max) The maximum allowable threat objects passing through a BMD system expressed as a

percentage of the design-to threat. To ensure overall system performance, permitted

leakage is "budgeted" among individual BMD phases and functions.

LEAP Lightweight Exoatmospheric Projectile.

LEASAT Leased Satellite.

Least Privilege This principle requires that each subject in a system be granted the most restrictive set

of privileges (or lowest clearance) needed for the performance of authorized tasks. The application of this privilege limits the damage that can result from accident, error, or

unauthorized use.

LED 1. Low Endoatmospheric Defense. 2. Light Emitting Diode.

LEDI Low Endoatmospheric Defense Interceptor.

LEDS 1. Low Endoatmospheric Defense System.

2. Link Eleven Display System (USN term)

LEI Low Endoatmospheric Interceptor.

LEIP Link Eleven Improvement Program (USN term).

LEL Low Energy Laser.

LELWS Low Energy Laser Weapon System.

LEM Logistics Element Manager (ILS term)

LEO 1. See Low Earth Orbit. 2. Launch and Early Orbit.

LETS LWIR Environment and Threat Simulation.

Level of Effort

(LOE)

Effort of a general or supportive nature that does not produce definite end products or results, e.g. contract man-hours.

Leverage 1. The advantage gained by boost-phase intercept, when a single booster kill may

eliminate many RVs and decoys before they are deployed. This could provide a favorable cost-exchange ratio for the defense and would reduce stress on later tiers of

the SDS. 2. In general, the power to act or influence to attain goals.

LF 1. Landing Force. 2. Low Frequency. 3. Launch and Forget.

LFIE Live Flight Integration Exercise.

LFOV Limited Field of View.

LFS Loral Federal System, Gaithersburg, MD.

LFT&E Live Fire Test and Evaluation.

LGB Laser Guided Bomb.

LGM 1. Laser Guided Missile. 2. Loop Group Multiplexer.

LGSM Light Ground Station Module (USA CECOM term).

LHO Amphibious Assault Ship.

Li Lithium.

LIC Low Intensity Conflict.

LIDAR See Light Detection and Ranging.

Life Cycle 1. The total phases through which an item passes from the time it is initially developed

until the time it is either consumed or disposed of as being excess to all known materiel requirements. 2. (Software). All the states a software or software related product passes

through from its inception until it is no longer useful.

Life Cycle of a Weapon System All phases of the system's life including research, development, test and evaluation, production, deployment (inventory), operations and support, and disposal.

Life Jacket The life support storage container for a Brilliant Pebbles singlet. The life jacket

contains subsystems that perform power, communications, and environmental protection

functions.

Life-Cycle Cost

(LCC)

The total cost to the Government of acquisition and ownership of that system over its useful life. It includes the cost of development, acquisition, support and, where

applicable, disposal.

Life-Cycle Management Process for administering an automated information system or hardware support system over its whole life, with emphasis on strengthening early decisions which shape costs

and utility.

Life-Cycle Model

A framework containing the processes, activities, and tasks involved in the development, operation, and support of the system, spanning the life of the system from

the definition of its requirements to the termination of its use.

Light Detection and Ranging (LIDAR) A precision probing instrument used to measure concentrations of different gasses or

particulates in a given amount of atmosphere.

Light Replicas (LREP)

Decoys that, by virtue of shape, closely approximate an RV's signature with little off-

load penalty.

LIMDIS Limited Distribution.

Limited **Production**

The initial production of a system in limited quantity. Part of an acquisition strategy to be used in test and evaluation for verification of design maturity, manufacturing process final proofing, and product engineering and to verify a factories capabilities prior to a decision to proceed with production. Decision usually made near the end of EMD or at Milestone IIIA or equivalent. (Also called Low-Rate Initial Production or Pilot Production.)

Limited Attack

An attack on the U.S. and its allies which provides a stressing timeline, and is geographically distinct. Not an all-out attack or mass wave.

Limited Defense System (LDS)

The development of systems, components, and architectures for a deployable anti-ballistic missile system (as described in section 232(a)(1) of the 1991 Missile Defense Act, as revised) capable of providing a highly effective defense of the United States against limited ballistic missile threats, including accidental or unauthorized launches or Third World attacks, but below a threshold that would bring into question strategic stability.

Limited Operational Capability (LOC)

A point in time when the first set of sensors and weapons are able to be employed to provide a limited protection system.

Limited Test Ban Treaty

The bilateral Treaty signed and ratified by the United States and the (former) U.S.S.R. in 1963 which prohibits nuclear tests in all locations except underground, and prohibits nuclear explosions underground if they cause radioactive debris to be present outside the territorial limits of the state under whose jurisdiction or control the test would be conducted.

LIN Line Item Number.

Linear Accelerator.

Line Item (Budget) A specific program end item with its own identity (e.g., B-1B Bomber).

Line of Sight (LOS)

The line from sensor to target necessary for the commencement of the detection, acquisition, track, and identification of a target.

Line Replaceable Unit (LRU)

An essential support item removed and replaced at field level to restore end item to an operationally ready condition. (Also called Weapon Replacement Assembly and Module Replaceable Unit).

Link Quality Evaluation

This testing of links to create bit error estimates and monitors natural or induced link interference.

Link-16 TADIL-J.

Link-18 ????

LIP Lethality Improvement Plan.

LIS Laser Isotope Separation.

LITINT Literature Intelligence.

Live Fire Test And

Evaluation (LFT&E)

Survivability testing and lethality testing required before full-scale production. Must be conducted on ACAT I and II programs for: (a) A covered system (a conventional weapon system designed to provide some degree of protection to the user in combat); (b) a major munition or missile program; (c) a product improvement program that will

significantly affect the survivability of a covered system.

LIVEX Live Exercise.

LIWA Land Information Warfare Activity.

LJ Life Jacket (BE term).

LL 1. Lincoln Laboratory, Lexington, MA. 2. Legislative Liaison. 3. Long Lead.

4. Lessons Learned.

LLM Long Lead Material.

LLNL Lawrence Livermore National Laboratory, Livermore, CA.

LLTIL Long-Lead-Time Items List (ILS term).

LLUM Low background LWIR Uniform Mercury Cadmium Teloride (HeCdTe).

LM 1. Lockheed Martin, a defense industry contractor.

2. Logistics Manager (ILS term).

LM/GES Lockheed Martin/Government Electronic Systems.

LMA Lockheed Martin Astronautics, a defense industry contractor.

LMANS Lockheed Martin Aeronautic and Naval Systems.

LMC Late Midcourse.

LMFBR Liquid-Metal Fast-Breeder Reactor.

LMIS Logistics Management Information System.

LMMA Lockheed Martin Missiles and Space.

LMSP Logistics Modeling and Simulation Panel (ILS term).

LNA Low Noise Amplifier.

LNC Local Network Controller.

LNE Low Noise Exciter (Electronics Engineering term).

LNO Liaison Officer.

LO 1. Local Oscillator (Electronics Engineering term).

2. Low Observables (LODE-related term).

LOA Letter of Agreement.

LOAD Low Altitude Defense.

LOC 1. Lines of Communication. 2. Lines of Code. 3. See Limited Operational Capability.

LOCAAS Low Cost Autonomous Attack System (USAF term).

Local Assessment of Engagement

The assessment of an engagement by the high resolution fire control sensors.

Local

Environment

The ISTC Local Environment contained within each node simulates the element to the degree necessary to generate a realistic input to the Element Processor of Element Processor Emulation and provide a realistic response to the Element Processor or Element Processor Emulation

Element Processor Emulation.

Lock On Signifies that a tracking or target-seeking system is continuously and automatically

tracking a target in one or more coordinates (e.g., range, bearing, elevation).

LODE Laser Optics Demonstration Experiment.

LODTM Large Optics Diamond Turning Machine.

LOE 1. Level of Effort. 2. Letter of Evaluation (AF).

LOF Lifejacket Orbital Flight (BE term).

Lofted Trajectory Trajectory with an apogee greater than the minimum-energy trajectory to the same

range.

LOG Logistics.

LOG. WIPT Logistics Working-level IPT.

LOGAM II Logistics Analysis Model II.

LOGFAC Logistics Feasibility Analysis Capability.

LOGFOR Logistics Force.

Logistics The science of planning and carrying out the movement and maintenance of forces. In

its most comprehensive sense, it includes those aspects of military operations which deal with: (1) design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materials; (2) movement, evacuation, and hospitalization of personnel; (3) acquisition or construction, maintenance, operation,

and disposition of facilities; and (4) acquisition or furnishing of services.

Logistics

Support Analysis

(LSA)

The selective application of scientific and engineering efforts undertaken during the acquisition process, as part of the systems engineering process, to assist in: causing support considerations to influence design; defining support requirements that are related optimally to design and to each other; acquiring the required support; and providing the

required support during the operational phase at minimum cost.

Logistics Support The supply and maintenance of materiel essential to proper operation of a system in the

force.

Logistics Support Analysis Record (LSAR) A formal tool under MIL-STD 1388-2A that uses records/forms to document operations and maintenance requirements, RAM, task analyses, technical data, support/test equipment, facilities, skill evaluation, supply support, ATE and TPS, and transportability. LSAR is the basis for training, personnel, supply provisioning and allowances construction, support equipment acquisition, facilities construction and preparation, and for maintenance.

Logistics Supportability The degree to which planned logistics support (including test, measurement, and diagnostic equipment; spares and repair parts; technical data; support facilities; transportation requirements; training; manpower; and software support) allow meeting system availability and wartime usage requirements.

LOGPLAN Logistics Plan.

LOGSIM Logistics Simulation Model.

LOI 1. Letter of Instruction. 2. Letter of Intent.

LOMEZ Low Altitude Missile Engagement Zone.

Long Lead Items

Those components of a system for which the times to design and fabricate are the longest, and, therefore, to which an early commitment of funds may be desirable in

order to meet the earliest possible date of system completion.

Long Wavelength Infrared (LWIR)

Thermal radiation emitted by a source in the electromagnetic spectrum encompassing infrared wavelengths of 6 to 30 microns.

LOR Level of Repair (ILS term).

LORA Level of Repair Analysis (ILS term).

LOS 1. See Line of Sight. 2. Large Optical Segment.

LOTS Logistics Over-The-Shore.

LOW Launch on Warning.

Low Altitude Demonstration System (LADS) Part of the SBIRS Low Program Definition and Risk Reduction (PDRR) program phase. The LADS will consist of a flight experiment and extensive ground demonstrations by Boeing North American. The LADS flight experiment will be launched in late FY 99 to demonstrate the sensor performance of a SBIRS Low concept and collect phenomenology data.

Low Earth Orbit (LEO)

These satellites are at altitudes between 100 and 400 nautical miles. They have short duration revolutions (about 90 minutes), short visibility envelopes (2.5 minutes up to 10 minutes over a tracking station), short life spans, and are most subject to orbital perturbations due to atmospheric drag and earth gravitational anomalies.

Low Endoatmosphere That portion of the earth's atmosphere, generally below 40 km altitude.

Low-Rate Initial Production (LRIP)

The production of a system in limited quantity to provide articles for operational test and evaluation, to establish an initial production base, and to permit an orderly increase in the production rate sufficient to lead to full-rate production upon successful completion

of operational testing.

LOWKATRER Low Weight Kinetic Energy Active Tracker.

LOWTRAN Atmospheric and Interstellar Background Signature Model.

LPAR Large Phased Array Radar.

LPD Low Probability of Detection.

LPE 1. Liquid Phase Epitaxy. 2. Launch point estimate.

LPI Low Probability of Intercept.

LPS Limited Protection System.

LR Long Range.

LRA 1. Line-Replaceable Assembly. 2. Long-Range Aviation.

LRB Liquid Rocket Booster.

LRC Lewis Research Center, Cleveland, OH.

LRE 1. Latest Revised Estimate. 2. Launch and Recovery Element.

LREP See Light Replicas.

LRF Laser Range Finder.

LRINF Longer Range Intermediate Nuclear Forces.

LRIP See Low-Rate Initial Production.

LRIP-OT Low Rate Initial Production - Operational Testing.

LRTBM Long Range TBM.

LRTNF Long-range Theater Nuclear Force.

LRU 1. Line Replaceable Units. 2. Line Replacement Units.

3. Lowest Replaceable Unit (ILS term)

LS 1. Launcher Site. 2. Logistics Support. 3. Launching Stations (PATRIOT).

LSA 1. See Logistics Support Analysis. 2. Labor Surplus Area.

LSAP Logistics Support Analysis Program.

LSAR Logistics Support Analysis Record.

LSART LSA Review Team (ILS term).

LSAT Laser Satellite.

LSAWG LSA Working Group.

LSE Lifetime Support Engineering (ILS term).

LSEA Lifetime Support Engineering Activity (ILS term).

LSI 1. Large Scale Integration (circuits).

2. Lead System Integrator (BMDO/NMD Program term)

LSRS Loral Space and Range Systems, Sunnyvale, CA.

LST 1. Laser Spot Tracker. 2. Landing Ship, Tank.

LSTS Launcher Station Test Site.

LTA Lead Time Analysis.

LTBT Limited Test Ban Treaty.

LTD Laser Target Designator.

LTH Lethality and Target Hardening.

LTS Link Translator System (Communications term).

LTV Launch Test Vehicle.

LU Launch and Update.

LUA See Launch Under Attack.

LUP Limited U.S. Protection.

LUT Limited User Test.

LUT/OA Limited User Test/Operational Assessment.

LVS Loral Vought Systems, a defense industry contractor.

LVT Low Volume Terminal (USN/NATO Tel/Comms term).

LW 1. Laser Weapons. 2. Land Warrior (USA term).

LWAN Local Wide Area Net.

LWIR See Long Wavelength Infrared.

LWIR FPA (PET) Long Wavelength Infrared Focal Plane Array (Pilotline Experiment Technology).

LYTBT Low-Yield Threshold Test Ban Treaty.

LZ Landing Zone.

1. Meter. 2. Minute. m

M 1. Model. 2. Million. 3. Mega.

M&LC Missile and Launch Control.

M&P Manpower and Personnel.

M&S 1. Materials and Structures. 2. Modeling and Simulation.

M-T-M Model - Test - Model.

M/LWIR Medium/Long Wavelength Infrared.

M/P Manpower/ Personnel.

MAA See Mission Area Analysis.

MAAG Military Assistance Advisory Group.

MAB Missile Assembly Building.

MAC 1. OBSOLETE. Military Airlift Command. See AMC.

2. Maintenance Allocation Chart.

MACCK Multi-Application Command and Control Kit (GD term for IVIS follow-on).

MACCS Marine Corps Air Command and Control System.

MACOM Major Army Command.

MAD 1. Mission Area Deficiency. 2. Mutually Assured Destruction.

MADCAP Mosaic Array Data Compression and Analysis Program.

MADS Modified Air Defense System.

MAE Medium Altitude Endurance.

MAGTF Marine Air-Ground Task Force.

Main Beam The primary directional EMR emitted from radar transmitters.

Maintainer An individual responsible for retaining the major defense system in or restoring it to a

> specified condition. Maintenance activities include inspection, testing, servicing,

classification as to serviceability, repair, rebuilding, and reclamation.

Maintenance A description of maintenance considerations and constraints for system/equipment under Concept/Plan

development. A preliminary maintenance concept is developed and submitted as part of the preliminary system operational concept for each alternative solution candidate by the operating command with the assistance of the implementing and supporting

commands. A major driver in design of the system/equipment and support planned for it.

Maintenance The corrective and preventive maintenance operations that do not require a deployment **Operations**

decision; it includes correction and subsequent validation testing and the update of

relevant status configuration, maintenance, and inventory data bases.

Maintenance Planning The process conducted to evolve and establish maintenance concepts and requirements for the lifetime of a material system; one of the principal elements of ILS.

MAIS

Mobile Automated Instrumentation Suite (USA term).

MAISRC

See Major Automated Information System Review Council

MAJCOM

Major Command (USAF).

Major Automated Information System Review Council (MAISRC) The Senior DoD information management acquisition review board chaired by the Assistant Secretary of Defense for Command, Control, Communication, and Intelligence. See DoD Directive 8120.2.

Major Defense Acquisition Program (MDAP) An acquisition program that is not a highly sensitive classified program (as determined by the Secretary of Defense) and that is:

- 1. Designated by the Under Secretary of Defense for Acquisition and Technology as a major defense acquisition program, or
- 2. Estimated by the Under Secretary of Defense for Acquisition and Technology to require:
 - a) An eventual total expenditure for research, development, test, and evaluation of more than \$200 million in fiscal year 1980 constant dollars (approximately \$300 million in fiscal year 1990 constant dollars), or
 - b) An eventual total expenditure for procurement of more than \$1 billion in fiscal year 1980 constant dollars (approximately \$1.8 billion in fiscal year 1990 constant dollars).

Major Modification A modification that in and of itself meets the criteria of acquisition category I or II or is designated as such by the milestone decision authority. Major modifications require a Milestone IV decision unless the decision to modify results from one of the alternatives considered as part of the Milestone I decision process. Upgrades are part of the Milestone 0 decision process.

Major System

A combination of elements that will function together to produce the capabilities required to fulfill a mission need, including hardware, equipment, software, or any combination thereof, but excluding construction or other improvements to real property. A system shall be considered a major system if it is estimated by the Under Secretary of Defense for Acquisition and Technology to require:

- 1. An eventual total expenditure for research, development, test, and evaluation of more than \$75,000,000 in fiscal year 1980 constant dollars (approximately \$115,000,000 in fiscal year 1990 constant dollars), or
- 2. An eventual total expenditure for procurement of more than \$300,000,000 in fiscal year 1980 constant dollars (approximately \$540,000,000 in fiscal year 1990 constant dollars).

MAM

Maintenance Assist Modules.

MAMDT

Mean Active Maintenance Downtime (ILS term).

Mandatory Access Control A means of restricting access to objects based on the sensitivity (as represented by a label) of the information contained in the objects and the formal authorization of subjects to access information of such sensitivity.

Maneuverable Reentry Vehicle (MARV) 1. A reentry vehicle capable of performing preplanned flight maneuvers during the reentry phase. The reentry vehicles deploy fins or other aerodynamic surfaces when they enter the atmosphere, allowing them to turn and dodge rather than fall ballistically. They have no ability to maneuver in space.

MANPER

Manpower and Personnel (ILS term)

Manpower Authorizations The billets in the manpower requirements structure that are planned to be filled.

Manpower Estimate Report (MER) An estimate of the number of personnel who will operate, maintain, support, and train for the acquisition upon full operational deployment. The Services prepared the estimates, and the SECDEF submits them to Congress 30 days prior to approval for EMD or production.

Manpower, Personnel, Training, and Safety (MPTS) The human dimension of the complete defense weapon system. The term MPTS also encompasses the concepts and disciplines of human factors engineering and health hazard prevention.

Manpower, Personnel, Training, and Safety (MPTS) Profiles A description of human dimensions and constraints involving a major system throughout the system life cycle. This includes, but is not limited to, descriptions and categorizations of occupations, aptitudes, individual skills and demographics, training system characteristics and components, potential system hazards, and other issues affecting the performance and welfare of operators, maintainers, and personnel that support existing, modified or new systems.

MANPRINT

Manpower and Personnel Integration (US Army).

MANTECH

See Manufacturing Technology.

Manufacturing (or Production)
Engineering

Preproduction planning and operation analysis applied to specific product designs. The functions of planning, specifying, and coordinating the application of required factory resources including: performing analyses of production operations, processes, and systems; applying new manufacturing methods, tooling, and equipment; controlling the introduction of engineering changes, and employing cost control and quality techniques from the factory viewpoint.

Manufacturing Operations, Development, and Integration Laboratory (MODIL) An SDS-peculiar integration mechanism to link product technology development concurrently with manufacturing process and control development for a cost-reducing effective SDS development.

Manufacturing Technology (MANTECH)

Manufacturing technology refers to any action which has as its objective the timely establishment or improvement of the manufacturing processes, techniques, or equipment required to support current and projected programs, and the assurance of the ability to produce, reduce lead time, ensure economic availability of end items, reduce costs, increase efficiency, improve reliability, or to enhance safety and anti-pollution measures. MANTECH, per se, is the specific DoD program in this area.

MAOC

Modular Air Operations Center (JFACC term).

MAOPR

Minimum Acceptable Operational Performance Requirements.

MAP

1. Master Attack Plan (JFACC term). 2. Modular Architecture Processor.

3. Minimum Acquisition Program.

MAR

Monthly Assessment Report (BMDO/POC term).

MARCO

Marine Corps.

Marine Air Command and **Control System** A US Marine Corps tactical air command and control system that provides the tactical air commander with the means to command, coordinate, and control all air operations within an assigned sector and to coordinate air operations with other Services. It is composed of command and control agencies with communications-electronics equipment that incorporates a capability from manual through semiautomatic control.

Mark/Markup

Line by line review and approval/disapproval/modification of the defense budget by

congressional committees.

MARS

Multiwarfare Assessment and Research System.

MARSYSCOM

US Marine Corps Systems Command, Quantico, VA

MARV

See Maneuverable Reentry Vehicle.

MARVIS

Mid-Apogee Reentry Vehicle Intercept System.

MAS

Mutual Assured Survival.

MASINT

Measurement and Signature Intelligence.

MASPAR

Massive Parallel Processors (THAAD Radar).

Mass Raid

Many Red ballistic missiles launched toward CONUS from several launch areas. A mass ASAT raid consists of several ASATs attacking Blue satellites.

MAST

Measurement and Simulation Technology-formerly Synthetic Scene Generation Model (SSGM).

Material Fielding

Materials Science

Plan to ensure smooth transition of system from developer to user.

Plan

The science of developing/altering and applying materials to obtain a resultant molecular structure with desirable physical properties and performance characteristics. (See Structures.) Also includes applying state-of-the-art advanced materials in the design of new SDS components and end items.

MATHSFA

Manufacturing and Testing of LWIR Hardened Seeker FPA Assemblies.

Matra BAe **Dynamics**

European missile manufacturer formed in 1996 from British Aerospace Dynamics and

Matra of France.

MATT

Multi-mission Advanced Tactical Terminal.

MATT Radio

UHF radio receiver for TRAP, TOPS, and TIBS.

MATTR

Mid And Terminal Tiers Review.

MAX

Maximum.

Maximum Attrition

Maximum attrition is employed in a target-rich environment to destroy the maximum number of RVs, regardless of the type, by using all available or allocated interceptors. This option may not satisfactorily defend specific or required assets.

MB

Megabyte.

MBA

1. Multi-Beam Antenna. 2. Masters of Business Administration.

MBE Molecular Beam Epitaxy.

MBFR Mutual and Balanced Force Reduction.

Mbps Megabits per second.

MBRV 1. Maneuvering Ballistic Reentry Vehicle.

2. Matching Ballistic Reentry Vehicle. A series of reentry vehicles used to replicate

specific threat characteristics.

MC 1. Mission Control. 2. See Midcourse phase. 3. Mission Capable (ILS term).

4. Military Committee.

MCA Micro Channel Architecture (TelComm/Computer term).

MCAS Marine Corps Air Station.

MCASS MTACCS Common Application Support Software.

MCBM Midcourse Battle Manager.

MCC Mission Control Complex/Center/Console.

MCCC Mobile Consolidated Command Center.

MCCDC Marine Corps Combat Development Center.

MCCR Mission Critical Computer Resources.

MCE Mission Control Element.

MCG Midcourse Guidance.

MCI 1. Midcourse Interceptor. 2. MCI Communications Corporation.

MCLOR Marine Corps LORA Model (USMC ILS term).

MCM 1. Multi-Chip Module. 2. Material Change Management.

MCOTEA Marine Corps Operational Test and Evaluation [Command].

MCP 1. Materiel Change Package (USA term). 2. Military Construction Program.

MCPDM Marine Corps Program Decision Making.

MCRDAC Marine Corps Research, Development & Acquisition Command.

MCS 1. Maneuver Control System. 2. Mid-course Sensor.

MCSS 1. Midcourse Surveillance System. 2. Mid-course Sensor Study.

3. Military Communications Satellite System.

MCT Mercury Cadmium Telluride (cf. HgCdTe).

MCTE Mission, Course of Action, Task, and Element Control Directives.

MCTL Militarily Critical Technologies List.

MCTR Missile Control Technology Regime.

MCV Mission Capable Vehicle.

MD Missile Defense.

MDA 1. Missile Defense Act. 2. Milestone Decision Authority.

3. McDonnell-Douglas Aerospace.

MDAHWG Missile Defense Ad Hoc Working Group.

MDAP Major Defense Acquisition Program.

MDART Missile Defense Activities Review Team.

MDBIC Missile Defense Barrel Integration Center.

MDC Midcourse Data Center, Advanced Research Center, Huntsville, AL.

MDCI Multi-Discipline Counterintelligence.

MDDC Missile Defense Data Center, USASSDC, Huntsville, AL.

MDP Manufacturing Data Package.

MDR 1. Medium Data Rate (TelComms/Computer term).

2. Milestone Decision Review. 3. Multi-national Defense Research.

MDSC Missile Defense Scientific and Technical Information Center.

MDSTC Missile Defense and Space Technology Center.

MDT Maintenance Down Time.

MDTD Mean Downtime Documentation (ILS term).

MDTOA Mean Downtime for Outside Assistance (ILS term).

MDTOR Mean Downtime for Other Reasons (ILS term).

MDTT Mean Downtime for Training (ILS term).

MDW Mass Destruction Weapons.

ME/VA Mission Essential/ Vulnerable Area.

.

MEA Mission Effectiveness Analysis (JFACC term).

MEADS See Medium Extended Air Defense System.

Mean Time Between Failures

(MTBF)

A measure of the reliability of an item. Defined as the total functioning life of an item divided by the total number of failures within the population during the measurement interval. The definition holds for time, rounds, miles, events, or other measures of unit

life. MTBF is a basic measure of reliability.

Mean Time To Repair (MTTR) The total elapsed time for corrective maintenance divided by the total number of corrective maintenance actions during a given period of time. A basic measure of maintainability.

Mean Time to Restore System (MTTRS) A measure of the system maintainability parameter related to availability and readiness. The total corrective maintenance time associated with downing events, divided by the total number of downing events, during a stated period of time. (Excludes time for off-system maintenance and repair of detached components.)

MEASAT

Malaysia East Asia Satellite.

Measure of Effectiveness (MOE) The quantitative expression (sometimes modified by subjective judgment) of the success of a system in achieving a specified objective.

MEC

Mission Essentially Code (ILS term).

Medium Earth Orbit (MEO) Space vehicles characterized by orbits between 400 and 10,000 nautical miles, longer duration revolution (2 to 12 hours), longer visibility envelopes (10 minutes up to approximately 1 hour), and generally longer lifetimes. This region contains the Van Allen radiation belts where electronic components need special protection.

Medium Extended Air Defense System (MEADS)

A lightweight, highly transportable, low-to-medium altitude air defense and theater missile defense system designed to protect critical fixed and maneuverable corps assets. MEADS superseded the Corps SAM program in 1995.

Medium Power Lasers Lasers that radiate power less than 1 MW, normally used to detect, identify, track, and designate a target vehicle.

Medium Range Ballistic Missile (MRBM)

A ballistic missile with a range from about 600 to 1,500 nautical miles.

Medium Wavelength Infrared (MWIR) Thermal radiation emitted by a source in the electromagnetic spectrum encompassing infrared wavelengths of 3 to 6 microns.

MEF

Marine Expeditionary Force.

MEILSR

Minimum Essential ILS Requirements (NSA term).

MEL

1. Maintenance Expenditure Limit. 2. Mobile Erector Launcher.

MEM

1. Mission Effectiveness Model. 2. Mission Equipment Modernization.

Memorandum of Agreement (MOA)

1. In contract administration, an agreement between a program manager and a Contract Administration Office, establishing the scope of responsibility of the Contract Administration Office with respect to the cost and schedule surveillance functions and objectives, and/or other contract administration functions on a specific contract or program. 2. Any written agreement in principle as to how a program will be administered.

Memorandum of Understanding (MOU) Official agreements concluded between the defense ministries of NATO nations and ranking below government level international treaties. De facto, such agreements are generally recognized by all partners as binding even if no legal claim could be based on the rights and obligations laid down in them.

MEO See Medium Earth Orbit.

MER See Manpower Estimate Report.

Mercury Cadmium Infrared sensing material.

Telluride (HCT)

MES Military Essential Support.

MESAR Multifunction Electronically Scanned Adaptive Radar (UK).

MESFET Metal Semiconductor Field Effect Transistor.

Mesosphere The portion of the atmosphere from about 30 to 80 kilometers above the earth.

Methods Engineering The technique that subjects each operation of a given piece of work to close analysis to eliminate every unnecessary element or operation and to approach the quickest and best method of performing each necessary element or operation. It includes the improvement and standardization of methods, equipment, and working conditions; operator training; the determination of standard times; and occasionally devising and administering various incentive plans.

METO Minimum Effort Task Order.

METOIA Minimum Effort Task Order Impact Assessment.

METOP Minimum Effort Task Order Plan.

METOR Minimum Effort Task Order Requirement.

Metric (Software). An indicator which measures some specific attribute of the software

development process.

Metrology The science of measurement, including the development of measurement standards and

systems for absolute and relative measurement. Used to determine conformance to technical requirements including the development of standards and systems for absolute

and relative measurements.

MeV Million Electron Volts.

MEZ Missile Engagement Zone.

MFAR Modular Multifunction Phased Array Radar.

MFEL Medical Free Electron Laser.

MFG Master Frequency Generator.

MFL Mulitple Folded Ladar.

MFLOPS Million Floating Point Operations Per Second.

MFP Major Force Program.

MFR Memorandum For Record.

MFS Communications Company, Incorporated.

MFSIM Multifunction Simulation (PATRIOT), Huntsville, AL.

MGEP See Mobile Ground Entry Point.

MGLI Midcourse Ground Launched Interceptor.

MGMT Management.

Mgt Management.

MGTS Mobile Ground Telemetry Station.

MHD Magneto-Hydro-Dynamic.

MHE 1. Material Handling Equipment. 2. Mobile Hauling Equipment.

MHV See Miniature Homing Vehicle.

mi Statute mile (5,280 feet).

MIC Management Information Center (BMDO).

MICOM 1. U.S. Army Missile Command, Redstone Arsenal, AL.

2. [Army] Missile Command (pre-Oct 96) (See AMCOM).

MIDAS Missile Defense Alarm System (US).

Midcourse (MC)

Phase

That portion of a ballistic missile's trajectory between the boost phase and the reentry phase when reentry vehicles and penaids travel at ballistic trajectories above the atmosphere. During this phase, a missile releases its warheads and decoys and is no longer a single object, but rather a swarm of RVs and penaids falling freely along present trajectories in space.

Midcourse Guidance The guidance applied to a missile between termination of the boost phase and the start of the terminal phase of flight.

Midcourse Space Experiment (MSX) Designed to provide demonstrations of midcourse acquisition and tracking from space, technology integration of optics, focal plane arrays, signal processing, etc., and collect background phenomenology measurements and target signature measurements.

Midgetman US ICBM.

MIDI Musical Instrument Digital Interface.

MIDS Multi-Functional Information System (USN/NATO Tel/Comms term).

MIIRD Mission Issue Identification and Resolution Document.

MIJI Meaconing, Intrusion, Jamming, and Interference.

MIL Man-in-the-Loop.

MIL-HDBK Military Handbook.

MIL-STD Military Standard.

MILCON Military Construction.

Milestone Decision

Authority

The individual designated in accordance with criteria established by the Under Secretary of Defense for Acquisition and Technology to approve entry of an acquisition program into the next phase.

Milestones (MS)

Major decision points that separate the phases of an acquisition program.

Military Capability

The ability to achieve a specified wartime objective (win a war or battle, destroy a target set). It includes four major components: a). Force Structure -- Numbers, size and composition of the units that compromise our Defense forces; b) Modernization -- Technical sophistication of forces, units, weapon systems, and equipment; c) Readiness -- The ability of forces, units, weapon systems, or equipment to deliver the outputs for which they were designed; d) Sustainability -- The ability to maintain the necessary level and duration of operational activity to achieve military objectives. Sustainability is a function of providing for and maintaining those levels of ready forces, materiel, and consumables necessary to support military effort.

Military Operational Requirements The formal expression of a military need, the response to which results in development or acquisition of items, equipment, or systems.

Military Requirement An established need justifying the timely allocation of resources to achieve a capability to accomplish approved military objectives, missions, or tasks.

Military Satellite (MILSAT) Military Strategy Selection A satellite used for military purposes, such as navigation or intelligence gathering.

The determination of: (1) what targets to defend and their priorities in order to achieve the selected national strategy, and (2) the type of attackers (and/or their corridors) to be intercepted.

Military Utility

The military worth of a system performing its mission in a competitive environment, including versatility (or potential) of the system. It is measured against the operational concept, operational effectiveness, safety, security, and cost/worth. Military utility estimates form a rational basis for making management decisions.

MILOGS Marine Integrated Logistics System (USMC term).

MILSAT See Military Satellite.

MILSATCOM Military Satellite Communications.

MILSPACE Military Space.

MILSPEC Military Specification.

MILSTAR Military Strategic and Tactical Relay (satellite system).

MILSTRIP Military Standard Requisitioning and Issue Procedures.

MIME Multipurpose Internet Mail Extension.

MIN Minimum.

min Minute.

Miniature Demand Assigned Multiple Access.

Miniature Homing Vehicle (MHV)/ Miniature Vehicle (MV) An air-launched direct-ascent ("pop-up") kinetic energy anti-satellite weapon.

Minimum Acceptable Operational Requirement The value for a particular parameter that is required to provide a system capability that will satisfy the validated mission need. Also known as the performance threshold.

Minimum Energy Trajectory The trajectory that produces maximum range for a given amount of energy.

Minimum Required Accomplishments Necessary tasks that must be completed during an acquisition phase prior to the next milestone decision review. Applies to all acquisition categories and highly sensitive classified programs.

Minuteman US ICBM.

MIP Maintenance Index Page (Navy ILS term).

MIPA Missile Procurement Army (Appropriation).

MIPR Military Interdepartmental Purchase (Procurement) Request.

MIPS 1. Marine Integrated Personnel System (USMC term).

2. Master Integrated Program Schedule.

3. Million Instructions Per Second (ADP term).

MIPT Management IPT.

MIRACL Mid Infrared Advanced Chemical Laser.

MIRS Management Information and Reporting System.

MIRV Multiple Independently Targetable Reentry Vehicle.

MIS Management Information System.

MISREP Mission Report (JFACC term).

MISSI Multilevel Information Systems Security Initiative.

Missile Defense Warning Condition A situation of peril declared by the competent military commander, that a ballistic missile attack is probable (Missile Defense Warning Yellow), imminent or in progress (Missile Defense Warning Red), or improbable (Missile Defense Warning White).

Missile Destruct Intentional destruction of a missile or similar vehicle for safety or other reasons.

Missile Guidance System A system that evaluates flight information, correlates it with target data, determines the desired flight path of a missile, and communicates the necessary commands to the missile flight control system.

Missile Intercept Zone That geographical division of the destruction area where surface-to-air missiles have primary responsibility for destruction of airborne objects.

Missile Release Line

The line at which an attacking aircraft could launch an air-to-surface missile against a specific target.

Missile Warning Center (MWC)

Located in CMAFB, the MWC is operated by USSPACECOM to fulfill ballistic missile TW/AA responsibilities of USCINCSPACE to external users to whom there are commitments. The MWC manages the ballistic missile sensors and reporting system in support of timely, accurate, and unambiguous warning of missile attack worldwide. MWC personnel, in coordination with other centers, validate and confirm report events. The Launch Correlation Unit (LCU) of the MWC ensures all domestic and cooperative launches are coordinated and reported so that they are not construed as hostile in accordance with the "Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War" between the US and USSR.

Mission

1. The task, together with the purpose, which clearly indicates the action to be taken and the reason therefor. 2. In common usage, especially when applied to lower military units, a duty assigned to an individual or unit; a task. 3. Missions are statements of the objective to be accomplished for a given situation. Missions will describe the situation and will include who, what, when, where, why, and how the BMD system will perform. They contain employment direction and procedures to BMD forces for a given situation to achieve specific defense objectives. (USSPACECOM)

Mission Area

A segment of the defense mission as established by the Secretary of Defense. Each DoD component has a mission area (i.e. Navy - sea control) for which it must equip its forces.

Mission Area Analysis (MAA)

Continuous analysis of assigned mission responsibilities in the several mission areas to identify deficiencies in the current and projected capabilities to meet essential mission needs, and to identify opportunities for the enhancement of capability through more effective systems and less costly methods.

Mission Capable (MC)

Material condition of an aircraft indicating it can perform at least one and potentially all of its designated missions. Mission capable is further defined as the sum of full mission capable and partial mission capable. Also called MC.

Mission Critical Computer Resources

Automated data processing equipment or services if the function, operation, or use: (1) involves intelligence activities; (2) involves cryptologic activities related to national security; (3) involves command and control of military forces; (4) involves equipment which is an integral part of a weapon or weapons system; or (5) is critical to direct fulfillment of military or intelligence missions.

Mission Critical System

A system whose operational effectiveness and operational suitability are essential to successful completion or to aggregate residual combat capability. If this system fails, the mission likely will not be completed. Such a system can be an auxiliary or supporting system, as well as a primary mission system.

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 the DoD Component.

Mission Need Analysis

Assesses alternatives in an operational context, identifying what force capabilities would be gained by pursuing any of a designated set of alternatives. Assesses the strengths and weaknesses of a military force when confronting a postulated threat in a specified scenario or set of circumstances.

Mission Need Statement (MNS) 1. A nonsystem specific statement of operational capability need, prepared IAW format in DoD 5000.2-M. Developed by DoD components and forwarded to the Joint Requirements Oversight Council (JROC) for validation and approval (major efforts), or just notification (minor efforts). The JROC also assesses all MNSs for joint service potential. MNSs go to the milestone decision authority for a determination on whether or not to convene a Milestone 0 review.

2. A statement of operational capability required to perform an assigned mission or to correct a deficiency in existing capability to perform the mission.

Mission Reliability

The probability that the system will perform mission essential functions for a period of time under the conditions stated in the mission profile.

MIST Mosaic Infrared Sensor Technology.

MIT Massachusetts Institute of Technology.

MIT/LL Massachusetts Institute of Technology / Lincoln Laboratory, Bedford, MA.

MIW Mine Warfare.

MK Mark (version).

MKV 1. Miniature Kill Vehicle. 2. Multiple Kill Vehicle.

MLCP Mission Launch Control Processor.

MLDT 1. Mean Logistics Delay Time (ILS term).

2. Missile Downlink Transmitter (USA term).

MLF Multi-Lateral Force.

MLI Multilayer Insulation.

MLRS 1. Multiple Launch Rocket System. 2. Multiple Long Range Rocket System.

MLS 1. Microwave Landing System (FAA airways term).

2. Multi-Level Security (COMSEC term).

MLV 1. Missile Launch Vehicle. 2. Medium Life Vehicle.

MLWIR Medium-Long Wavelength Infrared.

mm Millimeter.

MM Maintenance Manual.

MM III Minuteman III ICBM.

MMH Maintenance Man-hours (ILS term).

MMI Man-Machine Interface.

MMIC Monolithic Microwave Integrated Circuit.

MMIPT Milestone Management IPT (THAAD Program term).

MMM Multi-Mode Missile.

MMPM MEECN Message Processing Mode.

MMR Monthly Management Review.

MMS 1. Multi-Mode Seeker. 2. Missile Management Station (USA term).

MMS-CP Missile Management Station - Control Panel (USA term).

MMU Man Maneuvering Unit.

MMW Millimeter Wave.

MN-ED Materiel Need - Engineering Development (USA term).

MNS See Mission Need Statement.

MOA 1. See Memorandum of Agreement. 2. Military Operating Area.

MOA/U Memorandum of Agreement/Understanding.

MOAB Missile Optimized Anti-Ballistic.

MOB Main Operations Base.

Mobile Ground Entry Point (MGEP) The subset of GEPs which are transportable. GEPs provide the communications

interfaces between the SDS space orbital/sub-orbital elements and the C²E.

MOC Mobile Operations Center.

Mock-up A model, built to scale, of a machine, apparatus, or weapon. It is used in examining the

construction of critical clearances, in testing a new development, or in teaching

personnel how to operate or maintain the actual item.

MOCVD Metal Organic Chemical Vapor Deposition.

MOD 1. Ministry of Defense. 2. Modification.

Modem Modulator-Demodulator (TelComms/Computer term).

Modes Situational conditions or categories under which selective Rules of Engagement apply.

Examples include: Peacetime: Day to day operation when training, exercises, and routine maintenance and operations occur. Prior to crisis or war. Crisis: The transition

state between peacetime and war. War: Self-explanatory.

MODIL See Manufacturing Operations, Development, and Integration Laboratory.

Modularity The degree to which a system, computer program (or component) is composed of

discrete components such that a change to one component has minimal impact on other

components.

MOE See Measure of Effectiveness.

MOL Minimum Operating Level.

MOLNIYA Orbit This is a highly eccentric orbit with high apogee (.71 to .74) in the northern hemisphere

> and low perigee in the southern hemisphere. For a specific set of orbital parameters, this orbit has a changing velocity and altitude, which, when combined with the earth's rotation, keeps the orbiting satellite within view for very long periods (96%) above a

designated point on earth.

MOM 1. Measure of Merit. 2. Ministry of General Machine-building (Russian agency that

controlled enterprises that support RSA).

Mono Track Data on the location and movement of an object in space, that can be derived by a

single sensor.

Monostatic Radar A radar system in which the receiver and transmitter are collocated.

MOP 1. Memorandum of Policy. 2. Measure of Performance.

MOPA Master Oscillator Power Amplifier.

MOPP Mission-Oriented Protective Posture.

MOR 1. Memorandum of Record. 2. Military Operational Requirement.

MILSTAR Operator Requirements Analyst. **MORA**

MOS 1. Metal Oxide Semiconductor. 2. Military Occupational Specialty (USA term).

3. Military Operational Specialty.

Moscow BMD

The Soviet exoatmospheric system using the Dog House and Cat House phased-array System radars for long-range acquisition. The system might also use the Hen House early

warning radars for long-range acquisition. Target and interceptor tracking is performed

by mechanically-steered dish antennas.

MOSHED Multiplanar Organic Scintillator High Energy Detector.

MOSTT Mosaic Optical Sensor Technology Testbed.

MOTIF Maui Optical Tracking and Identification Facility, HI.

MOTR Multiple Object Tracking Radar.

MOTS Military Off The Shelf.

MOU Memorandum of Understanding.

MPA 1. Main Political Administration (USSR term).

2. Maintenance Planning Analysis (ILS term).

mph Miles per Hour.

MPL Multiple Pulse Laser.

MPOS Million Operations Per Second.

MPP 1. Massively Parallel Processor.

2. Materiel, Processes and Parts (USA term) (See also PMP)

MPRS Mission Planning Rehearsal System. **MPS** 1. Multiple Protective Shelters (once to be used for basing MX).

2. Main Propulsion System. 3. Master Program Schedule.

MPT Manpower, Personnel, and Training.

MPTS See Manpower, Personnel, Training, and Safety.

MR 1. Milliradian. 2. Mobile Reserve. 3. Maintenance Ratio (ILS term).

4. Missile Round (USA term)

MRB Material Review Board.

MRBM See Medium Range Ballistic Missile.

MRC 1. Maintenance Requirements Card (Navy ILS term).

2. Major Regional Conflict/Contingency.

MRCTS Missile Round Cable Test Set.

MRD Mission Requirements Document.

MRDA Mission Requirements and Definition Analysis.

MRJ a specific SETA contractor.

MRL Multiple Rocket Launcher.

MROC 1. Mobile Regional Operations Center.

2. Multiple Required Operational Capabilities.

MRP Missile Round Pallet.

MRR Mission Readiness Review (AFMC term).

MRSA Material Readiness Support Agency (US. Army).

MRSS Mobile Range Safety System.

MRTFB Major Range and Test Facility Base.

MRV Maneuverable Reentry Vehicle.

MRVIS Mid-Apogee Reentry Vehicle Intercept System.

ms Milliseconds.

MS 1. See Milestones. 2. Metric Standard. 3. Master of Science degree.

MS I Milestone One (DD 5000 term).

MS II Milestone Two (DD 5000 term).

MS III Milestone Three (DD 5000 term).

MS IV Milestone Four (DD 5000 term).

MS-DOS Microsoft Disk Operating System.

MSAG Multi-functional Self-Aligned Gate.

MSC 1. Military Sealift Command. 2. Mission Support Configuration.

3. Major Subordinate Command.

MSD Modular Security Device.

MSE 1. Mobile Subscriber Equipment.

2. Multiple Simultaneous Engagements.

MSEL Master Scenario Events List.

MSFC Marshall Space Flight Center, Huntsville, AL.

MSG Message.

MSGDB Message DataBase.

MSI Multi-Spectral Imagery.

MSIC Missile and Space Intelligence Center (DIA), Redstone Arsenal, AL.

MSL 1. Mean Sea Level. 2. Master Station Log. 3. Missile.

MSLS Multi-Service Launch System (Minuteman).

MSPS Mega Sample Per Second.

MSR 1. Missile Site Radar. 2. Monthly Status Report (BMDO/POC term).

MSS 1. Midcourse Surveillance System. 2. Multi-Satellite System. (ARPA).

3. Management Support System. 4. Modeling and Simulation Support.

MSSS Maui Space Surveillance Site.

MSTI Miniature Sensor Technology Integration satellite.

MSTS 1. Mid-course Surveillance and Tracking System.

2. Multi Source Tactical System.

MSU Mass Storage Unit (TelComm/Computer term).

MSWG Milestone Working Group.

MSX See Midcourse Space Experiment.

Mt Megaton.

MT 1. Metric Ton.

MTACCS Marine Tactical Air Command and Control System.

MTB(EME) Mean Time Between (Equipment Malfunction Event).

MTBCF Mean Time Between Critical Failures (ILS term).

MTBF See Mean Time Between Failures.

MTBFS MTBF Software (ILS term).

MTBM Mean Time Between Maintenance (ILS term).

MTBMA Mean Time Between Maintenance Actions (ILS term).

MTBR Mean Time Between Removals (ILS term).

MTCR Missile Technology Control Regime.

MTD 1. Maintenance Task Distribution (ILS term). 2. Material Test Directorate.

3. Missile Technology Demonstration (USAF program).

MTDS Minimum Technical Data Set (ACDP term).

Mtg Meeting.

MTI Moving Target Indicator.

MTM Maneuvering Tactical Missile.

MTMC Military Traffic Management Control.

Mtn Mountain.

MTOE Modified Table of Organization and Equipment.

MTOP Management Task Order Plan.

MTS Missile Tracking Sensor

MTTR See Mean Time To Repair.

MTTRS See Mean Time to Restore System.

MTTV Maneuvering Tactical Target Vehicle. A Storm target booster with a Pershing II reentry

vehicle.

MTU Military Training Unit (ILS term).

MTV Maneuvering Target Vehicle. A Hera target booster with a Pershing II reentry vehicle.

MAGTF Tactical Warfare Simulation. **MTWS**

MUE Mission Unique Equipment.

Multi-Service Doctrine

Fundamental principals that guide the employment of forces of two or more Services in coordinated action toward a common objective. It is ratified by two or more Services,

and is promulgated in multi-Service publications that identify the participating Services.

See also Joint Doctrine.

Multi-Spectral

Imagery Multi-Year **Appropriation** The image of an object obtained simultaneously in a number of discrete spectral bands.

Congressional appropriation available for incurring obligations for a definite period in excess of one fiscal year; i.e., for two or more years. (See Multi-Year Procurement.)

Multi-Year Procurement (MYP) A procurement of more units than the current year requirement. The total purchase is divided into segments which are annually budgeted and funded; however, the contractor is protected from cancellations through clauses in contracts.

Multilateration

A type of multistatic radar usually employing one transmitter and several receivers for target detection and tracking.

Multilevel Security Mode (ADP Security) A mode of operation using an operating system which provides a capability that permits various levels and categories or compartments of material to be concurrently stored and processed in an ADP system.

Multilevel Device

A device that is used in a manner that it simultaneously permits access by users with different security clearances and needs-to-know, but prevents users from obtaining access to information for which they lack authorization.

Multilevel Secure

A class of system containing information with different classifications that simultaneously permits access by users with different security clearances and needs-to-know, but prevents users from obtaining access to information for which they lack authorization.

Multiple Independently Targetable Reentry Vehicle (MIRV) A reentry vehicle carried by a delivery system that can place one or more reentry vehicles over each of several separate targets.

Multiple Intercept Defense Capability to make two or more intercepts per target or targets defended.

Multiple Phenomenology Observations of potential targets by means of different physical principles and different sensor systems. In the case of sensor systems, the use of multiple phenomenology makes it more difficult for an adversary to deceive them.

Multiple Reentry Vehicle A reentry vehicle of a delivery system which places more than one reentry vehicle over an individual target.

Multiple Silo Defense Capability to defend two or more silos.

Multiservice T&E

T&E conducted by two or more DoD Components for systems to be acquired by more than one DoD Component, or for a DoD Component's systems that have interfaces with equipment of another DoD Component.

Multistatic Radar

A radar system with a transmitter and several receivers, all separated. A special case is bistatic radar. An advantage of multistatic radar over monostatic radar is that even if transmitters, which might be detected by the enemy when operating, are attacked, receivers in other locations might not be noticed and might thereby escape attack.

MULTS Mobile Universal Link Translator System (NATO term).

MUS Mission Unique Software.

MUX Multiplex.

mV Millivolt.

MV See Miniature Vehicle.

MW 1. Mega-Watt (millions of watts). 2. Microwave. 3. Missile Warning.

MWC See Missile Warning Center.

Mw_e Megawatt (electrical energy).

MWIR See Medium Wavelength Infrared.

MWS Modular Workstation (ADP term).

 $\mathbf{M}\mathbf{w_{t}}$ Megawatt (thermal energy).

MX Formerly an experimental missile; newest addition to U.S. ICBM arsenal; also called

"Peacekeeper."

MY Man Year.

N 1. Neutron. 2. North.

N/A 1. Not Applicable. 2. Not Available.

N/SP CC NORAD/ US SPACECOM Commander.

NAAF Neutral Airframe Adaptive Flare.

NACMA NATO ACCS Management Agency.

NACSEM National Communications Security Emanations Memoranda.

NACSI National Communications Security Instruction.

NACSIM National Communications Security Information Memoranda.

NAD Navy Area Defense (lower tier).

NADC 1. Naval Air Development Center. 2. NATO Air Defense Committee.

NADGE NATO Air Defense Ground Environment.

NADIR Network Anomaly Detection Intrusion Reported.

NAE Navy Acquisition Executive.

NAF 1. Nonappropriated Fund. 2. Naval Air Facility.

NAI Named Areas of Interest.

NAIC National Air Intelligence Center (DIA), Wright-Patterson AFB, OH.

NAM Non-aligned Movement.

NAMEADSMA NATO MEADS Management Agency.

NAOC See National Airborne Operations Center (formerly NEACP).

NAP NDS Augmentation Package.

NAS 1. National Academy of Sciences, Washington, DC. 2. Naval Air Station.

3. National American Standard. 4. National Aerospace Standard.

NASA National Aeronautics and Space Administration, Washington, DC.

NASDA National Space Development Agency (Japan).

NASP National Aerospace Plane.

NATINAD NATO Integrated Air Defense.

National Airborne Operations Center One of four specially equipped Boeing 747s that during a national emergency, would allow the President and top military leaders to stay airborne for up to 12 hours while

(NAOC) linked to ground and space forces. Formerly NEACP.

National Command Authorities (NCA) The President and the Secretary of Defense or their duly deputized alternates or successors.

National Military Command Center (NMCC) The primary location for JCS command and control of all U.S. and Combined Forces. Located at the Pentagon, Arlington, VA.

National Military Command System (NMCS) The priority component of the Worldwide Military Command and Control System (WWMCCS) designed to support the National Command Authorities and Joint Chiefs of Staff in the exercise of their responsibilities. The NMC provides the means by which the President and the Secretary of Defense can receive warning and intelligence upon which accurate and timely decisions can be made, the resources of the Military Departments applied, military mission assigned, and by which direction can be given to CINCs or the commanders of other commands established by the NCA. The NMCS must be capable of providing information so that appropriate and timely responses can be selected and directed by the NCA and implemented. In addition, the NMCS supports the Joint Chiefs of Staff in carrying out their responsibilities.

National Missile Defense (NMD) System A ground-based anti-ballistic missile system designed to protect the U.S. against limited ballistic missile threats. It consists of four elements: ground-based interceptors (GBI); a ground-based radar (GBR); a battle management command, control, and communications (BM/ $\rm C^3$) system; and a constellation of Space and Missile Tracking System (SMTS) (a.k.a. Brilliant Eyes) satellites.

National Reconnaissance Office (NRO) A Department of Defense Agency tasked to ensure that the United States has the technology, spaceborne, and airborne assets needed to acquire intelligence worldwide, including support to such functions as monitoring arms control agreements, indications and warning, and the planning and conducting of military operations. This mission is accomplished through research and development, acquisition, and operation of spaceborne and airborne intelligence data collection systems.

National Strategy Selection The determination of (1) when it is in the national interest to activate and employ defense resources (i.e., the balance between responsiveness and crisis control), and (2) given an activation/employment decision, what should be the basic objective (e.g., force survival, survival of selected population centers, etc.).

National Test Bed (NTB)

OBSOLETE. A number of geographically separated simulation and test facilities that are linked through communications to simulate various portions of the ballistic missile defense (BMD) system for testing and validating operational and technical concepts and technologies.

National Test Bed Joint Program Office (NTBJPO) OBSOLETE. A Joint Service organization established to manage the NTF and execute the NTB program for BMDO.

National Test Facility (NTF) OBSOLETE. A large, modeling, simulation and test facility located on Falcon AFB in Colorado which serves as the central control, coordinating, and computing center for the NTB and as the primary integration and test facility of the BMD SE&I contractor.

National Warning Center (NWC) Center in CMAFB which activates the radio, TV, and sirens that warn the U.S. population of impending ballistic missile attack. Also assists with national disaster relief, forest fires, and other events assigned.

NATO North Atlantic Treaty Organization.

NATOPS Naval Air Training and Operating Procedures Standardization.

Natural Ground and Atmospheric Environments The environments which exist in the sensible atmosphere and on the surface of the earth. These include meteorological, seismic, biological and related natural conditions. This environment is applicable to ground-based assets and ground-launched interceptors in the atmospheric portions of flight, and it effects the propagation of radar and communications signals.

Natural Space Environment The natural environment which exists above the sensible atmosphere. Space begins approximately 100 km and above. This environment is applicable to orbiting space craft, to interceptors in the exoatmospheric portions of flight, and it affects the propagation of radar and communications signals.

NAVAIDS Navigational Aids.

Naval Space Command (NAVSPACE-COM) The naval component of USSPACECOM. Responsible for day-to-day operation of FLTSATCOM, NAVSPASUR, etc. Responsible for BMD elements that may be operated by the Navy. Located in Dahlgren, VA.

Naval Space Operations Center (NAVSPOC) Existing Navy component command center at Dahlgren, VA, responsible for logistical and administrative support of forces assigned to them.

NAVDSOC Navy Defense System Operations Center.

NAVFAC Navy Facilties Engineering Command.

NAVFOR Naval Force(s).

NAVMACS Navy Modular Automated Communications System (USN term).

NAVMIC Naval Maritime Intelligence Center, Suitland, MD.

NAVOSH Navy Occupational Safety and Health.

NAVSAT Navigation Satellite.

NAVSPACE Naval Space Command.

NAVSPACECOM See Naval Space Command.

NAVSPASUR Naval Position of SPASUR.

NAVSPOC See Naval Space Operations Center.

NAVSTAR Navigational satellite, part of the Global Positioning System (GPS).

Navy FAAWC Navy Force Anti-Air Warfare Commander.

NAWC Naval Air Warfare Center, Point Mogu, CA.

NAWC WPNS Naval Air Warfare Center, Weapons Division, China Lake, CA.

NBC Nuclear, Biological, Chemical.

NBS National Bureau of Standards.

NBTS Neutral Beam Test Stand.

NC Numerically Controlled (CAM computer term).

NCA See National Command Authorities.

NCC 1. NORAD Command Center, Colorado Springs, CO.

2. National Coordinating Center

NCCOSC Naval Command, Control, and Ocean Surveillance Center, San Diego, CA.

NCCS Navy Command and Control System.

NCDCS Narrow Band Coherent Data Collection System.

NCDD New Customer Development Database.

NCO Non-Commissioned Officer (USA/USAF/USMC term).

NCP See NORAD Command Post.

NCS 1. National Communications System. 2. Net Control Station. 3. Naval Control of

Shipping.

NCSC National Computer Security Center.

NDC Naval Doctrine Command.

NDD NMD System Deplyment Director.

NDE Non-Destructive Evaluation.

NDEW See Nuclear Directed Energy Weapon.

NDEWG Nuclear Directed Energy Weapon - Ground-Based.

NDI 1. See Non-Developmental Item. 2. Non-Destructive Inspection.

NDP 1. National Disclosure Policy. 2. Navy Doctrine Publication.

NDS 1. National Defense Stockpile 2. National Defense System.

3. Non-Developmental Software. 4. NUDET Detection System.

NDT Non-Destructive Test.

NDU National Defense University, Washington DC.

NEA 1. Northeast Asia. 2. Northeast Asia campaign scenario.

NEACP OBSOLETE. National Emergency Alternate Command Post (Now NAOC).

Near Real Time Pertaining to the timeliness of data or information that has been delayed by the time

required for electronic communication and automatic data processing. This implies that

there are no significant delays.

NEC 1. National Economics Council. 2. Navy Enlisted Code.

NECC Navy EHF Communications Controller.

Negate Early The use of any technique that precludes the use of, renders useless, or degrades an early

Warning warning capability.

Negation RV destruction or other actions which prevent damage to the defended area from

conventional, nuclear, chemical, or biological effects.

NEMP Nuclear Electromagnetic Pulse.

NEP 1. Nuclear Electric Propulsion. 2. Nuclear Environment Protection.

3. Nuclear Electric Power.

NEPA National Environmental Policy Act.

NEPSTP Nuclear Electric Propulsion Space flight Test Program.

NERF Naval Emitter Reference File (USN term).

NESEAD Naval Electronic Systems Engineering Activity Detachment (USN term).

Neutral Particle Beam (NPB) An energetic beam of neutral particles that is generally used to damage electronics.

NEV Network Experimental Version.

NEW Net Explosive Weight.

NFL New Foreign Launch.

NG National Guard.

NH&S Nuclear Hardening and Survivability.

NHA Next-Higher Assembly.

NHMT Nuclear-Hardened Mosaic Technology.

NHTF National Hover Test Facility, Edwards AFB, CA.

NIAG NATO Industrial Advisory Group.

NIC National Intelligence Council.

NID Naval Intelligence Database (USN term).

NIE National Intelligence Estimate (US).

NIH National Institute of Health.

NII National Information Infrastructure.

NIITF National Information Infrastructure Task Force.

NILE NATO Improved Link Eleven.

NILES NATO Improved Link Eleven System.

NIMA National Imagery and Mapping Agency, Fairfax, VA.

NIPS NTCS Intelligence Processing Service (USN term).

NISC OBSOLETE. Naval Intelligence Support Center. (Now Naval Maritime Intelligence

Center (NAVMIC).)

NISP National Industrial Security Program.

NISPOM NISP Operating Manual.

NIST National Institute of Standards and Technology, Gaithersburg, MD. (Formerly NBS

(National Bureau of Standards)).

NITES Naval Integrated Tactical Environmental Subsystem (USN term).

Nitze Criteria A reference to Paul Nitze, the Reagan Administration's chief arms control negotiator,

and his vocalization of the goal of the SDS as the achievement of raising the attack price where the defense cost is measured at the margin, not the total cost. Congress established the Nitze criteria as conditions of deploying an SDS in Section 222 of the

National Defense Authorization Act for FY 1986.

NIU NATO Interface Unit.

NIWA Naval Information Warfare Activity.

NK North Korea.

NKEW Nuclear Kinetic Energy Weapon.

NL The Netherlands.

NLO Nonlinear Optical.

NLOS 1. Non-Line of Sight. 2. Nonlinear Optical System.

NLT 1. Navy Lower Tier (Missile Defense). 2. Not Later Than.

nm 1. Nautical Mile (6,080 feet). 2. Nanometer.

NMA NATO Military Authority.

NMC Not Mission Capable.

NMCC See National Military Command Center.

NMCS See National Military Command System.

NMD 1. National Missile Defense (BMD weapons systems program).

2. Naval Missile Defense (USN term c.1996).

NMD 3+3 National Missile Defense Three Plus Three [program].

NMD GBR National Missile Defense Ground-Based Radar.

NMD IIPT NMD Integration Integrated Product Team (NMD Program term).

NMD JPO National Missile Defense Joint Program Office.

NMD/TRP National Missile Defense Technology Readiness Program.

NMDPO National Missile Defense Program Office (USA term).

NMM NMD Maturity Matrix.

NMSD National Military Strategy Document.

NNAG NATO Naval Armaments Group.

NNK See Non-Nuclear Kill.

NNPA Nuclear Non-Proliferation Act.

NNWS Non-Nuclear Weapon States.

NOAA National Oceanic and Atmospheric Administration, Washington, DC.

Node A set of equipment and processes which performs the communications functions at the

end of the datalinks which interconnect those elements which are resident on the

network.

NOI Notice of Intent (environmental term).

NOIC Naval Operational Intelligence Center.

Noise In the most general terms, noise is the undesired part of the process being observed or

measured. Its complement, the desired part, is usually referred to as the signal.

Non Material Solution

Solutions to mission needs (warfighting, deficiencies) that can be satisfied by changes in doctrine, tactics, operational concepts, training, or organization.

Non-

Developmental Item (NDI) 1. Any item of supply that is available in the commercial marketplace; or

- 2. Any previously developed item of supply that is in use by a department or agency of the United States, a state or local government, or a foreign government with which the United States has a mutual defense cooperation agreement; or
- 3. Any item of supply described in definition 1 or 2, above, that requires only minor modification in order to meet the requirements of the procuring agency; or
- 4. Any item of supply that is currently being produced that does not meet the requirements of definition 1, 2, or 3, above, solely because the item is not yet in use or is not yet available in the commercial marketplace.

Non-Nuclear Kill (NNK)

A kill that does not involve a nuclear detonation.

NONAP

Non-linear Adaptive Processor (Navy term).

Nonrecurring

Costs

1. Costs that are not proportional to the number of units produced. 2. A one time cost that will occur on a periodic basis for the same organization. Nonrecurring costs include (a) preliminary design effort; (b) design engineering; (c) all partially completed reporting elements manufactures for tests. 3. Training of service instructor personnel.

NOP Nuclear Operations.

NOR Notice of Revision.

NORAD See North American Aerospace Defense Command.

NORAD Command

Post (NCP)

A center in CMAFB responsible for controlling Air Combat Command (USAF), Canadian, and other assigned forces for designated atmospheric missions in defense of

North America.

NORSAR Norwegian Seismic Array.

North American Aerospace Defense Command (NORAD) A binational command of Canadian and U.S. forces responsible for defense of North America from bomber and ALCM/SLCM attack. Located in Colorado Springs, CO.

NORTHAG Northern Army Group (NATO).

NOS Network Operating System.

NOSC OBSOLETE. Naval Ocean Systems Center, San Diego, CA. See NCCOSC.

NPB See Neutral Particle Beam.

NPBSE NPB Space Experiment.

NPG Nuclear Planning Group.

NPI New Program Integration.

NPR 1. National Performance Review.

2. Nuclear Posture Review (OSD term c. 1994).

NPT Non-Proliferation Treaty.

NRaD Naval Research and Development Division (NCCOSC), San Diego, CA.

NRC 1. National Research Council. 2. Network Reliability Council.

3. Nuclear Regulatory Commission. 4. Nichols Research Corporation.

NREN National Research and Education Network.

NRL 1. Nuclear Referral List. 2. Naval Research Laboratory, Washington, DC.

NRLA Network Repair-Level Analysis.

NRO See National Reconnaissance Office.

NRSC Network Reliability Steering Committee.

NRT Near Real Time.

NS/EP National Security/ Emergency Preparedness.

NSA National Security Agency.

NSA/CSS NSA Central Security Service.

NSC 1. See National Security Council. 2. National Security Center.

NSCID National Security Council Intelligence Directive.

NSD National Security Directive.

NSDD OBSOLETE. National Security Decision Directive. Replaced by National Security

Directive (NSD).

NSDM National Security Decision Memorandum.

NSEN NMD System Engineering Notebook.

NSF National Science Foundation.

NSFS Naval Surface [Weapons] Fire Support (USN term).

NSG Naval Security Group.

NSIA National Security Industrial Association, Washington, DC.

NSIE Network Security Information Exchange.

NSN National Stock Number (ILS term).

NSNF Non-Strategic Nuclear Forces.

NSOC 1. National Signals Intelligence Operations Center. 2. Navy Satellite Operations Center.

NSP Not Separately Priced.

NSSC National Space Surveillance Center, CMAFB.

NSSD National Security Study Directive.

NSTAC National Security Telecommunications and Information Systems Security Committee.

NSTC National Science and Technology Council (EOP term).

NSWC Naval Surface Warfare Center, Dahlgren, VA.

NSWC/DD Naval Surface Weapons Center, Dahlgren Division.

NSWC/PHL Naval Surface Weapons Center, Port Hueneme Division.

NTACS Navy Tactical Air Control System.

NTB See National Test Bed.

NTB/WAN OBSOLETE. National Test Bed/Wide Area Network.

NTBI OBSOLETE. National Test Bed Integration.

NTBIC OBSOLETE. National Test Bed Integration Contract.

NTBJPO OBSOLETE. National Test Bed Joint Project Office.

NTBN OBSOLETE. National Test Bed Network.

NTC The National Test Center, located at Ft. Irwin, CA. A large maneuver area that serves

as the Army's primary testing center for Army maneuver forces. Friendly forces are

pitted against "enemy" forces to validate proposed procedures and doctrine.

NTC National Training Center (USA, Ft. Leavenworth, KS).

NTCS Naval Tactical Command System (USN term).

NTCS-A Naval Tactical Command System – Afloat (USN term).

NTDS Naval Tactical Display System.

NTE 1. Not-to-Exceed (Contracting term). 2. Node Test Environment.

NTF OBSOLETE. See Joint National Test Facility.

NTI Northern Telecom Incorporated.

NTIA National Telecommunications and Information Administration.

NTIC 1. Navy Tactical Intelligence Center. 2. National Technical Information Center.

NTIS National Technical Information Service.

NTISSC National Telecommunications and Information Systems Security Committee.

NTISSP National Security Telecommunications and Information Systems Security Publication.

NTM National Technical Means [of Verification] (US).

NTMG National Technical Means Gateway.

NTP 1. Notice to Proceed. 2. Navy Training Plan.

NTS Nevada Test Site (US).

NTU New Threat Upgrade.

NTW Navy Theater-Wide.

NTWD(S) Navy Theater-Wide Defense (System).

Nuclear Cloud See Radioactive Cloud.

Nuclear Directed Energy Weapon (NDEW) A directed energy weapon for which the source of energy is a specially designed nuclear device.

Nuclear Environment The environment which results from the detonation of nuclear weapons. Some components of this environment are directly emitted by the nuclear weapon and other collateral effects are created by the interaction of the emitted nuclear radiation with the earth's atmosphere, the earth's surface and the earth's magnetic field. The nuclear environment consists of radiation, blast, shock, thermal, electromagnetic pulse (EMP), emissions from radioactive debris, trapped electrons, and disturbances to the atmosphere and to the propagation paths for radar and communications. The nuclear environment exists in the exoatmospheric, atmospheric and ground BMD operational regimes.

Nuclear Hardness

A quantitative description of the resistance of a system or component to malfunction (temporary and permanent) and/or degraded performance induced by a nuclear weapon environment. Hardness is measured by resistance to physical quantities such as overpressure, peak velocities, energy absorbed, and electrical stress. Hardness is achieved through adhering to appropriate design specifications and is verified by one or more test and analysis techniques.

Nuclear Radiation

Particulate and electromagnetic radiation emitted from atomic nuclei in various nuclear processes. The important nuclear radiations, from the weapons standpoint, are alpha and beta particles, gamma rays, and neutrons. All nuclear radiations are ionizing radiations, but the reverse is not true; x-rays, for example, are included among ionizing radiations, but they are not nuclear radiations since they do not originate from atomic nuclei. (See Ionizing Radiation and X-Rays.)

Nuclear Survivability Characteristics

A quantitative description of the system features needed to meet its survivability requirements. Such system features include those design, performance, and operational capabilities used to limit or avoid the hostile environment, architectures that minimize the impact of localized damage to the larger wartime mission, as well as physical hardening to environment levels which cannot be mitigated otherwise. Survivability characteristics include proliferation, redundancy, avoidance, reconstitution, deception, and hardening.

Nuclear, Biological, and Chemical Contamination (NBCC)

The deposit and/or absorption of residual radioactive material or biological or chemical agents on or by structures, areas, personnel, or objects.

- Nuclear Contamination. Residual radioactive material resulting from fallout or rainout, and residual radiation from a system produced by a nuclear explosion, and persisting longer than one minute after burst.
- Biological Contamination. Microorganisms and toxins that cause disease in humans, plants, or animals or cause deterioration of material.
- Chemical Contamination. Chemical substances intended for use in military operations to kill, seriously injure, incapacitate, or temporarily irritate humans.

Nuclear, Biological, and Chemical Contamination Survivability The capability of a system and its crew to withstand a NBCC environment and relevant decontamination without losing the ability to accomplish the assigned mission. A NBCC survivable system is hardened against NBCC and decontaminates; it can be decontaminated, and it is compatible with individual protective equipment.

- Hardness. The capability of material to withstand the material -damaging effects of NBCC and relevant decontamination.
- Decontamination. The process of making personnel and material safe by rendering harmless or removing radioactive, chemical, or biological material.
- Compatibility. The capability of a system to be operated, maintained, and resupplied by persons wearing individual protective equipment, in all climates for which the system is designed, and for the period specified in the operational requirements document.

NUDET Nuclear Detonation.

NUICCS NORAD and USSPACECOM Integrated Command and Control System.

NUT Navy Upper Tier (Missile Defense).

NVG Night Vision Goggles.

NVIS Near Vertical Incidence System (SINCGARS term).

NVMEN Non-Volatile Memory (TelComms/Computer term).

NWC 1. See National Warning Center. 2. National War College. 3. Naval War College. 4.

Nuclear Weapons Council. 5. Naval Weapons Center.

NWE Nuclear Weapons Effect.

NWFZ Nuclear Weapons Free Zone.

NWP Naval Warfare Publication.

NWS National Weather Service.

NWSC Naval Weapons Support Center.

NWSUS Navy WWMCCS Site Unique Software.

O&M Operations and Maintenance.

O&O Plan Operational & Organizational Plan (Army).

O&S 1. Operations and Support. 2. Operations and Sustainment.

O-Level Organizational Level (ILS term).

O/A On or About.

OA 1. Operational Assessment. 2. Operational Availability.

3. Options Assessment (BM/C3 Program term c. 1994-6).

OAA Other Agreements Authority (OSD term).

OAB Outer air battle.

OAC Operating Agency Code.

OAMP See Optical Airborne Measurement Program.

OAO Corporation, Greenbelt, MD.

OAR Chairman of the Joint Chiefs of Staff Operation Plans Assessment Report.

OAS Organization of American States.

OASA Office of the Assistant Secretary of the Army.

OASD Office of Assistant Secretary of Defense.

OASD(C3I) Office of the Assistance Secretary of Defense (C31).

OASP On-Array Advanced Signal Processing.

OB Operating Budget.

OBAN Operating Budget Account Number.

OBDP Onboard Data Processor.

OBE Overtaken By Events.

OBJ Object.

Object Rate (Max) The maximum rate (per second) that a sensor can acquire RVs, decoys, AOs, or

fractionated missile/PBV debris.

Object-Oriented A software development approach that organizes software as a collection of objects

containing both data structure and behavior.

Object-Oriented

Analysis

The process by which a real-world problem is examined in terms of a collection of

objects to understand requirements, without planning the implementation.

Objects in FOV

(Max)

The maximum number of RVs, decoys, AOs, or fractionated missile/PBV debris that a

sensor can acquire at one time.

Obligation A duty to make a future payment of money. The duty is incurred as soon as an order is

placed, or a contract is awarded. The placement of an order is sufficient. An obligation "legally" encumbers a specified sum of money that will require outlays or expenditures

in the future.

Obligation 1. A congressional authorization to procure goods and services within a specified amount Authority

by appropriation or other authorization. 2. The administrative extension of such

authority, as by apportionment of funding. 3. The amount of authority so granted.

Obscurant A material (e.g., smoke or chaff) used to conceal an object from observation by a radio

> or optical sensor. Smoke may be used to conceal an object from observation by an optical sensor, and chaff may be used to conceal an object from observation by a radio

sensor (e.g., radar).

Observable A measurable target attribute.

OBSV Observation.

 \mathbf{OC} Operations Center.

OCA Offensive Counterair.

OCD **Operational Concept Document**

OCI Organizational Conflict of Interest.

OCM Overt Countermeasure.

OCONUS Outside CONUS.

OCR Optical Character Reader.

OCS 1. Operational Control System. 2. Ozone Depleting Chemical.

OCU 1. Operators Console Unit (THAAD). 2. Operators Control Unit.

OD Optical Disk (PATRIOT).

OD PA&E Office of the Director, Program Analysis and Evaluation.

ODA Optical Discrimination Algorithms/Architecture.

ODASD Office of the Deputy Assistant Secretary of Defense.

ODCS Office, Deputy Chief of Staff.

ODCSINT Office of the Deputy Chief of Staff for Intelligence.

ODCSOPS Office of the Deputy Chief of Staff for Operations and Plans (DAHQ term).

ODDI Office of the Director of Defense Information.

ODES Operational and Developmental Experiments Simulator.

ODISC4 Office of the Director of Information Systems for C4.

OEC 1. Operational Evaluation Command (USA term). 2. Other Early Capability. **OECD** Organization for Economic Cooperation and Development.

OEM Original Equipment Manufacturer.

Off the Shelf Procurement of existing system or equipment without an RDT&E program or with minor

development to make the system suitable for DoD needs. May be commercial

system/equipment or one already in DoD inventory. See Non-Developmental Item.

Off-the-Shelf Item An item which has been developed and produced to military or commercial standards

and specifications, is readily available for delivery from an industrial source, and may

be procured without change to satisfy a military requirement.

Offense/Defense Coordination The coordination of the strategic defense system operations with unified/specified strategic offense commands to achieve overall U.S. and Allied strategic mission

objectives.

Offensive Counter Air Operation An operation mounted to destroy, disrupt, or limit enemy air power as close to its source

as possible.

OFP Operational Flight Program.

OFS Operational Flight Simulation.

OGA Other Government Agencies.

OI Operating Instruction.

OIG Operations Interface Group.

OIPT Overarching Integrated Product (Process) Team.

OIS 1. Orbital Insertion Stage. 2. Office of Information Security.

OIW Offensive Information Warfare.

OJCS Office of the Joint Chiefs of Staff.

OJT On-the-Job Training.

OLA Office of Legislative Affairs (Navy).

OLC² Operational Level Command and Control.

OLE Object Linking and Embedding (TelComm/Computer term).

OLS Operational Line scan System.

OLSP Operational Logistics Support Plan (Navy term).

OM Operating (Operations) Manual.

OMA Office of Military Application (US).

OMB Office of Management and Budget.

OMC Operations and Maintenance Contractor.

OMG Operational Maneuver Group.

OMI Operations Maintenance and Integration.

OMNCS Office of the Manager, National Communications System.

OMSCWG Operational Message Space Command Working Group.

OMT Other Military Target(s).

OMU Orbital Maneuvering Unit.

OMV Orbital Maneuvering Vehicle.

ON Optic Needle.

On-Line A unit that is operational, not dormant, but is not participating with on-going functions.

ONI Office of Naval Intelligence.

ONR Office of Naval Research, Arlington, VA.

OOD Object-Oriented Design.

OODB Object-Oriented Database.

OOMS On-Orbit Maintenance/Servicing.

OOTW Operations Other Than War.

OP 1. Optical Processing. 2. Orthogonal Polarization.

OP RQ/TEST IPT Operational Requirements and Testing IPT (MEADS Program term).

OPA Optical Parametric Amplification.

OPANAL Name of agency for the prohibition of nuclear weapons in Latin America.

OPCC OBSOLETE. Offut Processing and Correlation Center. (Now Alternate Processing and

Correlation Center (APCC).)

OPCOM Operational Command (NATO).

OPCON See Operational Control.

OPCW Organization for the Prohibition of Chemical Weapons.

OPEC Organization of Petroleum Exporting Countries.

Operate Commands and data distributed throughout the SDS to operate the system.

Commands

Operating Budget An operating budget is the annual budget of an activity stated in terms of Budget

Classification Code, functional/subfunctional categories, and cost accounts. It contains estimates of the total value of resources required for the performance of the mission, including reimbursable work or services for others. It also includes estimates of

workload in terms of total work units identified by cost accounts.

Operating Costs

Those program costs necessary to operate and maintain the capability. These costs include Military Personnel, and Operations and Maintenance.

Operating System

Software that controls the execution of computer programs. It may provide scheduling, debugging, input and output control, accounting, storage assignment, data management, and related service. Sometimes called supervisor, executive, monitor, or master control program depending on the computer manufacturer.

Operation

1. The intentional changing of an object in any of its physical or chemical characteristics. 2. The assembly or disassembly of parts or objects. 3. The preparation of an object for another operation, transportation, inspection, or storage. 4. Planning, calculating, or the giving or receiving of information. 5. Military action using deployed forces. 6. A military action or the carrying out of a strategic, tactical, service, training, or administrative military mission; the process of carrying on combat, including movement, supply, attack, defense, and maneuvers needed to gain the objectives of any battle or campaign.

Operation and Organizational Plan (O&O Plan)

Describes how an Army system will be integrated into the force structure, deployed, operated and supported in peacetime and wartime.

Operation Order

A directive issued by a commander to subordinate commanders for the purpose of effecting the coordinated execution of an operation. Also called OPORD.

Operation Plan (OPLAN)

Any plan, except for the Single Integrated Operational Plan, for the conduct of military operations. Plans are prepared by combatant commanders in response to requirements established by the Chairman of the Joint Chiefs of Staff and by commanders of subordinate commands in response to requirements tasked by the establishing unified commander. Operation plans are prepared in either a complete format of an OPLAN or as a concept plan (CONPLAN). a) OPLAN. An operation plan for the conduct of joint operations that can be used as a basis for development of an operation order (OPORD). An OPLAN identifies the forces and supplies required to execute the CINC's Strategic Concept and a movement schedule of these resources to the theater of operations. The forces and supplies are identified in time-phased force deployment data flies. OPLANs will include all phases of the tasked operation. b) CONPLAN. An operation plan in an abbreviated format that would require considerable expansion or alteration to convert it into an OPLAN or OPORD. A CONPLAN contains the CINC's Strategic Concept and those annexes and appendixes deemed necessary by the combatant commander to complete planning.

Operational Assessment

An evaluation of operational effectiveness and operational suitability made by an independent operational test activity, with user support as required, on other than production systems. The focus of an operational assessment is on significant trends noted in development efforts, programmatic voids, areas of risk, adequacy of requirements, and the ability of the program to support adequate operational testing. Operational assessments may be made at any time using technology demonstrators, prototypes, mockups, engineering development models, or simulations but will not substitute for the independent operational test and evaluation necessary to support full production decisions.

Operational Availability

The degree, expressed in terms of 1.0 as the highest, to which one can expect an equipment or weapon system to work properly when it is required. The equation is uptime over uptime plus downtime, expressed as Ao. It is the quantitative link between readiness objectives and supportability.

Operational Capability

The measure of the results of the mission, given the condition of the system during the mission (dependability).

Operational Control (OPCON)

Transferable command authority that may be exercised by commanders at any echelon at or below the level of combatant command. Operational control is inherent in Combatant Command (command authority) and is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish missions assigned to the command. Operational control should be exercised through the commanders of subordinate organizations; normally this authority is exercised through the Service component commanders. Operational control normally provides full authority to organize commands and forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions. Operational control does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training.

Operational Effectiveness

The overall degree of mission accomplishment of a system when used by representative personnel in the environment planned or expected (e.g., natural, electronic, threat, etc.) for operational employment of the system considering organization, doctrine, tactics, survivability, vulnerability, and threat (including countermeasures, initial nuclear weapons effects, nuclear, biological, and chemical contamination (NBCC) threats).

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.

Operational Level of War

The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or areas of operations. Activities at this level link tactics and strategy by establishing operational objectives needed to accomplish the strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they ensure the logistic and administrative support of tactical forces, and provide a means by which tactical successes are exploited to achieve strategic objectives.

Operational Mode

The configuration of the defense system element or segment. Refers to the operational environment of system, i.e., test configuration or training configuration.

Operational Readiness

The capability of a unit/formation, 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.

Operational Reliability

The reliability of a system or software subsystem in its actual use environment. Operational reliability may differ considerably from reliability in the non-operational or test environment.

Operational Requirement

Navy document which describes major characteristics of the alternative selected by OPNAV. It is submitted as originating document for all Navy new starts (less than major programs)--ACATs II, III, IV.

Operational Requirements Document (ORD)

Documents the user's objectives and minimum acceptable requirements for operational performance of a proposed concept or system. Format has been standardized across all DoD components by DoDI 5000.1 and DoD 5000.2-M.

Operational Suitability

The degree to which a system can be placed satisfactorily in field use with consideration given to availability, compatibility, transportability, interoperability, reliability, wartime usage rates, maintainability, safety, human factors, manpower supportability, logistics supportability, natural environmental effects and impacts, documentation, and training requirements.

Operational Test and Evaluation (OT&E)

That T&E conducted to estimate a system's military utility, 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.

Operationally Ready

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

Operations and Support (O&S) Costs

Those resources required to operate and support a system, subsystem, or a major component during its useful life in the operational inventory.

Operations Profile

An identification of all participants in an operation, their actions, and the time those actions occur in the operation. Includes assessment of operational procedures to ascertain whether stereotyped or predictable patterns are discernible.

Operations Security (OPSEC) Survey

The method of evaluating the protection afforded a given operation. It is composed of multiple functional outlines that identify possible weaknesses or inefficiencies of an operation that could, if exploited, degrade operational effectiveness.

OPEVAL Operational Evaluation (Navy).

OPINE Operation in Nuclear Environment.

OPINTEL Operational Intelligence Processor.

OPLAN See Operation Plan.

OPM Office of Personal Management.

OPNAV Office of the Chief of Naval Operations.

OPNAVINST Chief of Naval Operations Instruction.

OPNS Operations.

OPO Optical Parametric Oscillation.

OPORD Operation Order.

OPP Other Physical Principles.

OPR Office of Primary Responsibility.

Ops Operations (employment).

OPS Operations.

OPSDEPS Service Operations Deputies.

OPSEC Operations Security.

OPSMOD Operations Module.

OPTEC Operational Test and Evaluation Command, Alexandria, VA. (U.S. Army)

OPTEMPO Operating Tempo.

OPTEVFOR Operational Test and Evaluation Force. (U.S. Navy)

Optic Cobra CENTCOM Joint TMD Warfighter Exercise.

Optic Needle EUCOM Joint TMD Warfighter Exercise.

Optical Processing A type of analog processing in which the behavior of light beams, passed through optical

systems, is used in problem solving.

Optical Airborne Measurement Program (OAMP) A program involving an aircraft-mounted research platform to conduct surveillance experiments that can be used to design future defensive systems. (Also known as Cobra

Eye.)

Optical Coating Layers of materials that alter/protect the physical/electronic properties of the material to

which they are applied.

OR 1. Operations Research. 2. Operational Requirement (Navy).

3. Operational Readiness. 4. Operational Reliability.

OR/SA (ORSA) Operations Research/Systems Analysis.

ORACL Overtone Research Advanced Chemical Laser.

ORACLE HYLTE Overtone Research Advanced Chemical Laser Hypersonic Low Temperature.

Orbital Maneuvering Vehicle (OMV) NASA program to provide capability to perform satellite on-orbit servicing. Operates

from shuttle and Space Station.

Orbital Elements Any set of several parameters (e.g., semi-major axis, eccentricity, inclination, etc.) used

to specify the position and motion of a satellite. Six independent orbital elements are required to unambiguously specify the position of a satellite in a Keplerian orbit at a

particular time.

Orbiting Debris Term referring to all earth-orbiting objects except active satellites.

ORC Operational Readiness Condition.

ORCA Operational Requirements Continuity Assessment.

ORD See Operational Requirements Document.

ORDALT Ordnance Alteration.

Order of Battle The identification, strength, command structure, and disposition of the personnel, units,

and equipment of any military force.

Order Wire Message Organic A communications support function for internal control of communications elements.

Assigned to and forming an essential part of a military organization. Organic parts of a unit are those listed in its table of organization for the Army, Air Force, and Marine Corps, and are assigned to the administrative organizations of the operating forces for

the Navy.

Ornate Impact USFK Joint TMD Warfighter Exercise.

ORNL Oak Ridge National Laboratory, TN.

ORTA Office of Research and Technology Applications.

ORU Orbital Replacement Unit.

ORWG Operational Requirements Working Group.

OS 1. Open Skies [treaty]. 2. Operating System (Computer term).

3. Operations Specialist. 4. Operational Suitability.

OSA Optical Society of America.

OSC 1. Optical Signature Code. 2. Operational Systems Control.

OSCE Organization for Cooperation and Security in Europe.

OSD Office of the Secretary of Defense.

OSE Operational Support Equipment.

OSEIT Operations and Support Engineering Integration Tool.

OSF Open Systems Foundation.

OSH Occupational Safety and Health.

OSHA Occupational Safety and Health Act.

OSI 1. Operator System Interface. 2. Open System Interconnection.

OSIA On Site Inspection Agency, Washington, DC.

OSIM Object Simulation (NMD BMC3 term).

OSIP Operational System Integration Plan.

OSIWG Operating Systems Interface Working Group.

OSJTF Open Systems Joint Task Force.

OSM Object Sighting Message.

OSS Operations Support System (Navy C3 program).

OSTP Office of Science and Technology Policy.

OSWR Office of Science and Weapons Research.

OT 1. Operational Test. 2. Offensive Threat.

OT&E See Operational Test and Evaluation.

OTA 1. Office of Technology Assessment, Washington, DC.

2. Operational Test Agency.

OTCIXS Officer in Tactical Command Information Exchange Subsystem (Navy term).

OTDR Optical Time-Domain Reflectometer.

OTF Object Track Profile.

Over-the-Horizon. OTH

OTH-B Over-The-Horizon Backscatter (radar).

OTH-T Over-The-Horizon Targeting.

OTO Operational Test Organization.

OTP Outline Test Plan.

OTS Off-the-Shelf.

OTSA Off-the-Shelf Analysis.

OTV Orbital Transfer Vehicle.

OUSD Office of the Under Secretary of Defense.

OUSD (A&T) Office of the Under Secretary of Defense (Acquisition & Technology).

OBSOLETE. See OUSD (A&T). OUSD (A)

Out of Band Laser

Flux

(Sensor) Laser energy directed at a sensor that is intended to damage or disrupt the

sensor and is outside the sensor's bandwidth.

Out-Years Normally, six years beyond the year being worked in the upcoming POM/budget.

Outer Space Treaty of 1967 A multilateral treaty signed and ratified by both the United States and the (former) Soviet Union. Article IV of the Outer Space Treaty forbids basing nuclear weapons or

other weapons of mass destruction in space.

Outlays Actual expenditures. Checks issued, interest accrued on the public debt, or other

payments, net of refunds and reimbursements. Total budget outlays consist of the sum of

the outlays from appropriations and funds in the budget, less receipts.

Overlay BMD

An advanced exoatmospheric defense system oriented toward defense of ICBMs, consisting of missile-borne, passive infra-red sensors and non-nuclear homing System

interceptors.

OWG Operating Working Group. P&D Planning and Design (MILCON term).

P&M 1. Producibility and Manufacturing. 2. Procure and Manufacture.

P.B. President's Budget.

 \mathbf{P}^2 Pollution Prevention.

Pre-Planned Near-Real-Time Assessment and Adaptation. p²NRTA&A

P3 Pollution Prevention Program.

P31 See Preplanned Product Improvement.

PA 1. Product Assurance. 2. Public Affairs.

PA&E Program Analysis and Evaluation.

PA&ID Program Analysis and Integration Directorate.

PAC 1. PATRIOT Advanced Capability. 2. Program Assessment Center. (BMDO)

PAC-2 PATRIOT Advanced Capability-2.

PAC-2/-3 PATRIOT Advanced Capability, Level 2/Level 3. Formerly called ERINT.

PAC-3 PATRIOT Advanced Capability-3.

PAC-3 SIM PAC-3 Simulation (PATRIOT), Huntsville, AL.

PAC-4 PATRIOT Advanced Capability-4.

PACA Professional Aerospace Contractors Association.

PACAF [United States] Air Forces Pacific.

PACBAR Pacific [Radar] Barrier.

PACFLT Pacific Fleet (US).

Packaging, Handling, Storage,

and

Transportation (PHS&T)

Packet Switching

(PSW)

The resources, processes, procedures, design considerations, and methods to ensure that all system, equipment, and support items are preserved, packaged, handled, and transported properly, including environmental considerations, equipment preservation requirements for short- and long-term storage, and transportability.

A data transmission process, utilizing addressed packets, whereby a channel is occupied

only for the duration of transmission of the packet. In certain data communication networks the data may be formatted into a packet or divided and then formatted into a number of packets (either by the data terminal equipment or by equipment within the network) for transmission and multiplexing purposes.

PACOM [United States] Pacific Command.

PACOSS Passive and Active Controls of Space Structures.

PADIL Patriot Data & Information Link. **PAFB** Patterson Air Force Base.

PAL Permissive Action Link.

PALS Protection Against Limited Strikes (SDIO term).

PAM 1. Pulse Amplitude Modulation. 2. Pamphlet (USA term).

PAN Polyacrylonatrile [carbon fiber].

Pancake Altitude Altitude at which the trailing edge of a chaff puff/cloud effectively catches up to the

leading edge because of atmospheric slowdown.

PAP Predicted Aim Point.

PAR 1. Phased-Array Radar. 2. Perimeter Acquisition Radar. (See Phased Array.) 3.

Preprocessing Analysis Report. 4. Program Assessment Report.

5. Pulse Acquisition Radar.

Parallel Processing In parallel processing multiple processors (CPUs) divide up a large task into smaller

ones and each CPU acts on the subdivided task simultaneously so that much higher

effective processing speeds can be attained.

Parametric Cost

A cost estimating methodology using statistical relationships between historical costs **Estimate** and other program variables such as system physical or performance characteristics,

contractor output measures, manpower loading, etc.

PARCS See Perimeter Acquisition Radar and Attack Characterization System.

PARPRO Peacetime Application of Reconnaissance Programs.

Partial Mission Capable

Material condition of an aircraft or training device indicating that it can perform at least one, but not all, of its missions. Also called PMC. See also Full Mission Capable.

Participating Service

A military Service that supports the lead Service in the development of a joint acquisition program by its contribution of personnel and/or funds.

Particle Beam (PB)

High energy beam made up of atomic/sub-atomic particles (electrons, protons, or neutrons) accelerated to near the speed of light.

Particle Beam Weapon (PBW) A weapon that relies on the technology of particle accelerators (atom-smashers) to emit beams of charged or neutral particles which travel near the speed of light. Such a beam could theoretically destroy a target by several means, e.g., electronics upset, electronics damage, softening/melting of materials, sensor damage, and initiation of high explosives.

PASS 1. POET Advanced Submunition Study.

2. Passive and Active Sensor Subsystem.

3. Procurement Automated Source System.

Passive In surveillance, an adjective applied to actions or equipment which emit no energy

capable of being detected.

Passive Air Defense

All measures, other than active air defense, taken to minimize the effectiveness of hostile air action. These measures include deception, dispersion, and the use of

protective construction.

Passive Communications Security Threats

Threats to electronic systems posed by a capability to obtain intelligence through intercepting and evaluating intentional and inadvertent electromagnetic emanations from electronic components of the system; e.g. communications interception and direction finding.

Passive Defense

1. Measures taken to reduce the probability of and to minimize the effects of damage caused by hostile action without the intention of taking the initiative. 2. Passive defense minimizes the probability and effects of theater missile attack by reducing an enemy's ability to target friendly assets, reducing the vulnerability of critical forces and infrastructure, and improving the potential to survive and resume operations after an attack. Passive measures might include counter-surveillance, deception, camouflage and concealment, hardening, electronic warfare, mobility, dispersal, and redundancy. Passive defense is considered one of the four pillars of TMD capability. (JCS J-38 CONOPS)

Passive Sensor

A sensor that detects naturally occurring emissions from a target for tracking and/or identification purposes.

PAT Process Action Team.

PAT&E Production Acceptance Test and Evaluation.

PATHS Precursor Above-the-Horizon Sensor.

PATRIOT See Phased Array Tracking Radar Intercept On Target (missile).

PAVE Precision Acquisition of Vehicle Entry (USAF term).

PAVE PAWS Position And Velocity Extraction Phased Array Warning System.

Phased array SLBM warning system. Four sites:

a. East Otis ANG Base, MA

b. WestBeale AFB, CA

c. Southeastd. Southwestd. Goodfellow AFB, TX

PAWS Phased-Array Warning System (USAF term).

Payload (Missile)

- 1. The warhead, its container, and activating devices in a military missile.
- 2. The satellite or research vehicle of a space probe or research missile.

Payload Build-up (Missile and Space) The process by which the scientific instrumentation (sensors, detectors, etc.) and necessary mechanical and electronic subassemblies are assembled into a complete operational package capable of achieving the scientific objectives of the mission.

Payload Integration (Missile and Space) The compatible installation of a complete payload package into the spacecraft and space vehicle.

PB

- 1. See Particle Beam. 2. Post-Boost. 3. See President's Budget.
- 4. Program Baseline.

PB/MT/D ATD Post-Boost/Midcourse Tracking/Discrimination ATD.

PBCRAW Post-Boost Control Reaction Altitude Wafer.

PBCS Post-Boost Control System.

PBD Program Budget Decision.

PBI Post-Boost Intercept.

PBP See Post-Boost Phase.

PBS President's Budget Submission.

PBV See Post-Boost Vehicle.

PBW See Particle Beam Weapon.

PC 1. Printed Circuit. 2. Personal Computer. 3. Principals Committee.

PC-PC Personal Computer to Personal Computer (JFACC term).

PCA See Physical Configuration Audit.

PCAST President's Committee of Advisors on Science and Technology.

PCB Printed Circuit Board.

PCC Pilot Command Center (C2E term).

PCD Program Connectivity Diagram (BMDO/POC term).

PCE PLRS Communications Enhancement.

PCERT Pursue Computer Emergency Response Team.

PCF Packet Control Facility (TelComm term).

PCI Peripheral Component Interface.

PCL 1. Pulsed Chemical Laser. 2. Printer Control Language.

PCM 1. Pulse Code Modulation. 2. Plugable COMSEC Module.

PCMCIA Personal Computer Miniature Connector Interface Adapter.

PCO Procurement Contracting Officer (FAR term).

PCR 1. Program Change Request. 2. Procurement Center Representative.

PCS 1. Permanent Change of Station (ILS term). 2. Planning and Control System.

PCWBS Preliminary Control Work Breakdown Structure.

PD 1. Presidential Directive. 2. Procedures Description. 3. Probability of Damage. 4.

Probability of Detection. 5. See Preconditions for Defense. 6. Program Director (AF). 7. Production/Deployment.

8. Phenomenology Document. 9. Passive Defense.

PD&V Projection Definition and Validation (MEADS Program term).

PD-V Program Definition-Validation [Phase] (Acquisition term).

PD/RR Program Design and Risk Reduction (Acquisition Phase term).

PDB 1. Post Deployment Build (PATRIOT). 2. Power Distribution Box.

PDC Plume Data Center, AEDC, TN.

PDD 1. Point Defense Demonstration (USN term). 2. Presidential Decision Directive.

PDL Programmatic Design/ Development Language, e.g., Ada.

PDM Program Decision Memorandum (DD 5000 term).

PDM (**I or II**) See Program Decision Memorandum (First or Second).

PDP Pulse Doppler Processor.

PDR 1. See Preliminary Design Review. 2. Program Design Review (DoD 5000.1/2).

2. Processing Data Rate (TelComm/Computer term).

PDRR 1. Program Description, Requirements Review [phase] (DD 5000.2 term).

2. See Program Definition (Development) and Risk Reduction.

PDSL See Process Data Sensitivity Label.

PDSS Post-Development Software Support (ILS term).

PDUSD Principal Deputy Under Secretary of Defense.

PDUSD(**A&T**) Principal Deputy Under Secretary of Defense (Acquisition and Technology).

PDV Program Definition and Validation.

PE 1. Program Element. 2. Programmable Energy.

Peacekeeper US MX Missile.

Peak Gamma Dose Rate The maximum rate (per second) of gamma radiation that the system could survive and

continue functioning.

PEC 1. Program Element Code. 2. See Pre-authorized Engagement Criteria.

PEELS Parametric Endo-Exoatmospheric Lethality Simulation.

PEIP Programmable Embedded INFOSEC Product (ex-MSD).

PEIS Programmatic Environmental Impact Statement.

PEM 1. Program Element Monitor (AF). 2. Privacy Enhanced Mail.

3. Propagation Engagement Model.

PENAID Penetration Aid.

Penaid (Formerly an acronym for Penetration Aid.) Techniques and/or devices employed by

(Penetration Aid) offensive aerospace weapon systems to increase the probability of penetrating enemy

defenses.

Penetration Testing

The portion of security testing in which the penetrators attempt to circumvent the security features of the system. The penetrators may be assumed to use all system design and implementation documentation, which may include listings of system source code, manuals, and circuit diagrams. The penetrators work under no constraints other than those that would be applied to ordinary users.

PEO See Program Executive Officer.

PEO (AMD) Program Executive Officer, Air and Missile Defense. (U.S. Army)

PEO (SC/AP) Program Executive Officer, Surface Combatants/AEGIS Program.

PEO (TAD) Program Executive Officer, Theater Air Defense. (U.S. Navy)

PEO (TAD)-B Program Executive Officer, U.S. Navy Theater Ballistic Missile Defense Program Office.

PEP Producibility Engineering and Planning.

PEPP See Producibility Engineering and Production Planning.

Peregrine An Air Force boost-phase interceptor concept under development at USAF/SMC.

Performance Those operational and support characteristics of the system that allow it to effectively

and efficiently perform its assigned mission over time. The support characteristics of the system include both supportability aspects of the design and the support elements

necessary for system operation.

Performance Requirement A requirement that specifies a performance characteristic that a system or system or system component must possess; for example, speed, accuracy, frequency.

Performance Specification 1. A specification that sets forth the performance requirements for a system or system component. 2. Synonymous with requirements specification.

Perimeter Acquisition Radar and Attack Characterization System (PARCS) AN/FPQ-16 phased array radar at Cavalier AFS, ND, used for early warning and attack assessment.

Period (nodal) Time for a satellite to travel once around its orbit.

Permeability Having the ability to diffuse through or penetrate something.

Pershing II OBSOLETE. US intermediate-range missile deployed in Europe.

PERT Program Evaluation and Review Technique.

PERT Chart A graphic portrayal of milestones, activities, and their dependency upon other activities

for completion, and depiction of the critical path.

PESHE Programmatic Enivronmental Safety and Health Evaluation.

PET 1. Pilot-Line Experiment Technology. 2. Production Environmental Test.

PFC Prototype Flight Cryocooler.

PFD Preconditions for Defense.

PFIAB President's Foreign Intelligence Advisory Board.

PFS Pre-Feasibility Study (UKMOD).

PGG Patrol Gunboat, Guided missile (Naval term).

PGGH Patrol Gunboat, Guided missile, Hydrofoil (Naval term).

PGM Precision Guided Munition.

PGU Power Generation Unit.

PH&S Packaging, Handling and Storage (see PHST) (ILS term).

Phase One

Engineering Team

(POET)

An FFRDC providing technical support to the Phase I Program Office. Now referred to

as POET.

Phased Array The arranging of radiating and/or receiving elements that, although physically

stationary, are electronically steerable and can switch rapidly from one target to another

(e.g., phased array radar).

Phased Array Tracking Radar Intercept On Target (missile) (PATRIOT) A point or limited area defense system originally built to intercept aircraft. PAC-3 improvements, which will give it greater capability against theater ballistic missiles, include upgrades to the radar and selection of an improved missile, either PATRIOT

Multimode Missile or ERINT.

Phased

Deployment

The sequential steps of element deployments leading to a designated system capability

that is realizable with fiscal and technological constraints.

Phenomenology The topological classification of a class of phenomena. Phenomenology efforts collect

and analyze optical and radar signature data, and model phenomena required by systems

developers to design and evaluate SDS elements.

PHI Photonic Hit Indicator.

PHIGS Programmer's Hierarchical Interactive Graphics System.

PHOTINT Photographic Intelligence.

Photochemical A chemical reaction resulting from exposure to radiant energy or light.

Photoelectric

Effect

The process whereby a gamma ray (or x-ray photon) with energy somewhat greater than that of the binding energy of an electron in an atom, transfers all its energy to the

electron which is consequently removed from the atom. Since it has lost all its energy,

the photon ceases to exist. (See Photon.)

Photon A unit or "particle" of electromagnetic radiation, carrying a quantum of energy which is

characteristic of the particular radiation.

PHS&T See Packaging, Handling, Storage, and Transportation.

Physical Agents Descriptive term that includes non-ionizing EMR, static electric and magnetic fields,

ionization radiation, energy beams, noise, explosions, de-orbiting debris, and extreme

cold.

Physical Configuration Audit (PCA) Physical examination to verify that the configuration item(s) "as built" conforms to the technical documentation that defines the item. Approval by the government program office of the CI product specification and satisfactory completion of this audit established the product baseline. May be conducted on first full production or first LRIP

team.

PI See Program Integrator.

PIA Personnel Identification/ Authorization System (USA term).

PIC 1. PLRS Interface Controller (USA term). 2. Policy Integration Committee.

3. Program Information Center (Computer programmer term).

Picture Element

(PIXEL)

The smallest element of a display space that can be independently assigned color and intensity; the finest detail that can be effectively reproduced on a recording medium.

PIDS Prime Item Development Specification.

Pilot Production Production line normally established during EMD to test new manufacturing methods

and procedures. Normally funded by RDT&E until the line is proven. Not the same as

long range initial production.

PIM Position of Intended Movement (USN term).

PIMS Programmable Implantable Medication System.

PIP 1. Predicted Impact Point. 2. See Predicted Intercept Point.

3. Product Improvement Proposal/Program. 4. Product Integrity Program.

PIPT Program Integrated Product (Process) Team.

PIR Program Information Report.

PIXEL See Picture Element.

P_k See Probability of Kill.

PKCS Public Key Cryptography Standard.

Pkh Probability of Kill, given a hit.

PKO Peacekeeping Operations.

Pkss Probability of kill -- single shot.

PL 1. Probability of Leakage. 2. Phillips Laboratory, Kirtland AFB, NM. 3. Public Law.

PLA 1. People's Liberation Army (China's army). 2. Patent License Agreement.

PLAN People's Liberation Army/Navy (China's).

Planning, Programming, Budgeting System (PPBS) The primary resource allocation process of DoD. One of three major decision-making support systems for defense acquisition. It is a formal, systematic structure for making decisions on policy, strategy, and the development of forces and capabilities to accomplish anticipated missions. PPBS is a cyclic process containing three distinct, but interrelated phases: planning, which produces the Program Objectives Memorandum (POM) for the Military Departments and Defense Agencies; and budgeting, which produces the DoD portion of the President's Budget. DoD PPBS is a biennial process starting in January of each odd numbered year with a national security guidance to initiate the planning phase, and ending in January of the next odd numbered year with the President's budget submission to Congress. (Defense Systems Management College)

PLCCE 1. OBSOLETE. Program Life Cycle Cost Estimate. See Program Office Estimate (POE).

2. Program Manager's Life Cycle Cost Estimate.

PLISN Provisioning List Item Sequence Number (ILS term).

PLRS Position Location Reporting System (USA term).

Plume Data Center AEDC, Arnold AFB, TN.

PLV Payload Launch Vehicle.

PM 1. See Program Manager. 2. Preventive Maintenance.

PMA 1. See Program Management Agreement. 2. Post-Mission Analysis.

3. Pressurized Mating Adapter (NASA term related to the space station).

PMASIT PMA Software Input Tool (BMDO/DPI S/W tool).

PMC PCI Mezzanine Card (Computer H/W term).

PMD 1. Program Management Document. 2. Program Management Directive (AF).

PMEL Precision Measurement Equipment Laboratory.

PMI Preventive Maintenance Inspection.

PMIT PATRIOT Missile Integration Team (PAC-3 Program term).

PMJEG Performance Measurement Joint Evaluation Group.

PMO Program Management Office.

PMP 1. Parts, Materiel and Processes (USA term) (See also MPP).

2. Program Master Plan. 3. Prime Mission Product.

4. Program Management Plan.

PMR 1. Program Management Review. 2. Pacific Missile Range.

3. Program Manager's Review (PAC-3 term).

PMRF/KTF Pacific Missile Range Facility/Kauai Test Facility, Barking Sands, Kauai, HI.

PMS 1. Planned Maintenance System (ILS term).

2. Performance Measurement System.

PMTC Pacific Missile Test Center, Pt. Mugu, CA.

PMWG Producibility and Manufacturing Working Group.

P_N Probability of Negation.

PNE Peaceful Nuclear Explosion.

PNET Peaceful Nuclear Explosion Treaty.

PO 1. [Acquisition] Program Office.

2. Purchase Order.

POA&M Plan of Actions and Milestones.

POC 1. See Point of Contact. 2. Proof of Concept.

3. Payload Operations Center, Kirtland AFB. 4. Program Operations/ Control.

POC-ET 1. Proof of Concept - Experimental Terminal.

2. Proof of Concept/Experimental Test (e.g., modular USSTRATCOM ground mobile

command post).

POCT Passive Optical Component Technology.

POD 1. Plan of the Day. 2. Probability of Detection. 3. Port of Debarkation.

PODIUM Project Origination Design, Implementation and Maintenance.

POE 1. Program Office Estimate. 2. Projected Operating Environment.

POET A consortium of scientist and engineers from FFRDCs providing technical support to the

BMDO. (Formerly referred to as the Phase One Engineering Team.)

Point Defense The defense or protection of special vital elements and installations; e.g., command and

control facilities, air bases, etc.

Point Defense

System

A terminal defense system using radars and large numbers of guided projectiles to

defend ICBMs. This concept was considered in the early 1980s.

Pointing The aiming of sensors or defense weapons at a target with sufficient accuracy either to

track the target or to aim with sufficient accuracy to destroy it. Pointing and tracking

are frequently integrated operations.

POL Petroleum, Oil, and Lubrication.

POLAD Political Advisor.

POM See Program Objectives Memorandum.

POMCUS Pre-positioning Of Materiel Configured to Unit Sets.

POP Proof of Principle.

Port Covers Mechanism for thrust termination of solid-propellant systems.

Portability (Software) The extent to which a software component originally developed on one

computer or operating system can be used on another computer or operating system.

POS 1. Primary Operating Stocks. 2. Probability Of Success.

3. Position.

Poseidon Class of US nuclear ballistic submarines (USN term).

POSIX Portable Operating System Interface.

POST Portable Optical Sensor Tester.

Post-Attack The period following the attack, prior to the next wave.

Post-Attack In nuclear warfare, that period which extends from the termination of the final attack

Period until political authorities agree to terminate hostilities.

Post-Boost That portion of the trajectory of a ballistic missile between the end of powered flight and **Phase (PBP)** release of the last RV. Applies only to multiple-warhead ballistic missiles.

(USSPACECOM)

Post-Boost The portion of a rocket payload that carries multiple warheads and which has the **Vehicle (PBV)** maneuvering capability to independently target each warhead on a final trajectory

toward a target. Also referred to as a "bus."

POSTPROD Post-Production.

POTS OBSOLETE. Phase One Threat Specification.

PP 1. Parallel Processing. 2. Principal Polarization. 3. Post Processing.

4. Program Plan. 5. Pave Paws.

PPBES 1. Planning, Programming, Budgeting, and Execution System.

2. Program Planning and Budgeting System.

PPBS See Planning, Programming, Budgeting System.

PPG 1. Parallel Programming Group. 2. Program Planning Guidance.

PPI POM Preparation Instructions.

PPIP Program Protection and Implementation Plan.

PPIRS See Producibility Programming and Issues Resolution Strategies.

PPL Provisioning Parts List (ILS term).

PPLI Provisioning Parts List Index (ILS term).

PPP 1. Program Protection Plan. 2. Point-to-Point Protocol.

PPQT Pre-Production Qualification Test.

PPS 1. Precision Positioning System. 2. Post-Production Support (ILS term).

3. Program Planning Summary (BMDO PAC term).

PPU Prime Power Unit (THAAD).

PQT Production Qualification Test.

PR 1. Procurement Request.

PRA Program Review Authority.

PRB 1. Planning and Resources Board. 2. Program Review Board.

PRC 1. Program Review Committee. 2. People's Republic of China.

3. PRC, Inc., McLean, VA.

PRD Presidential Review Decision.

PRDA Program Research and Development Announcement.

PRDR Pre-production Reliability Design Review.

Pre-Allocated Defense

A preplanned decision to designate a specific number of defensive assets to be used against a specific target or set of targets or to defend a specified asset or set of assets. The defense will select the best tactic to use based on the number of interceptors available, their probability to kill, the number of targets under attack to be defended, and the scope of the attack.

Pre-Attack A period of time immediately prior to an attack, usually hours to minutes to tipoff.

Pre-Authorized Engagement Criteria (PEC) Pre-specified quantitative operational parameter thresholds which when surpassed cause automated engagements to be enabled.

Pre-Commit Strategy A tactic in which defense weapons are fired without being individually committed to specific targets. Target commitment would occur relatively late in the defensive weapon's trajectory.

Pre-Launch Survivability The probability that a delivery and/or launch vehicle will survive an enemy attack under an established condition of warning.

Precedence

1. A designator which indicates the order in which a number of messages shall be served. Four precedence levels are provided for SDS, with one being the highest and four the lowest. Messages with precedence level one are served first and those with level four last. These correspond to the four precedence levels, Flash, Immediate, Priority, and Routine respectively. 2. (Reconnaissance) A letter designation, assigned by a unit requesting several reconnaissance missions, to indicate the relative order of importance, within an established priority, of the mission requested.

Precision Decoys

Decoys that precisely match RV characteristics either exoatmospherically or endoatmospherically, or both, and seek to deceive the defense into intercepting them.

Preconditions for Defense (PD)

PDs are NCA preapproved criteria, authorities, and procedures that delineate circumstances under which USCINCSPACE BMD forces will initiate or continue combat engagements and operations against hostile ballistic missile attacks directed at the United States, its Allies, or U.S. interests during peace, crisis, and war.

Predicted Intercept Point (PIP) The calculated position in space where the target and interceptor coincide.

Preferential Defense

Preferential defense is the a-priori assignment of defensive assets to protect given facilities or capabilities.

Preferential Defense Strategy

A tactic used as part of the SDS strategy to optimize the use of weapons and sensors by selecting high value targets for engagement by the defense while temporarily allowing less important targets to pass. This strategy forces the offense to attack with several times as many RVs as the defense has interceptors. Since preferential defense demands precise impact point prediction, the strategy is placed at a disadvantage if targets are closely spaced, if RVs can maneuver or if the defense intercepts ICBMs in the boost phase.

Preferential Offense

The concentration of offensive assets on a subset of targets.

Preliminary Design Review (PDR)

A review conducted on each configuration item to evaluate the progress, technical adequacy, and risk resolution of the selected design approach; to determine its compatibility with performance and engineering requirements of the development specification; and to establish the existence and compatibility of the physical and functional interfaces among the item and other items of equipment, facilities, computer programs, and personnel. Conducted during Phase I, Demonstration and Validation (for prototypes), and Phase II, Engineering and Manufacturing Development.

Preplanned Product Improvement (P³I)

Planned future evolutionary improvement of developmental systems for which design considerations are effected during development to enhance future application of projected technology. Includes improvements planned for ongoing systems that go beyond the performance envelope to achieve a needed operational capability.

Preplanned Response Options (PRO)

Ballistic Missile Defense (BMD) reactions which have been preplanned, analyzed, and preapproved, for specific ballistic missile threats. The PRO, equivalent to an operations plan, consist of a number of Defense Employment Options (DEO) which provide force employment objectives to Component forces based upon the world situation, national objectives/guidance, BMD asset status, and the intent of the threat. PRO are automatically processed with real-time human oversight and control when USCINCSPACE directs execution.

Preproduction Prototype

An article in final form employing standard parts, representative of articles to be produced subsequently in a production line.

Preproduction Test

This is a test of design-qualified hardware that is produced using production tooling and processes which will be used to produce the operational hardware. No production hardware should be accepted prior to satisfactory completion of this test. Test objectives include: gaining confidence that production hardware is going to work; that it will be reliable; that it can be maintained and supported by the user; and that it is not overdesigned.

Preset Guidance

A technique of missile control wherein a predetermined flight plan is set into the control mechanism and cannot be adjusted after launching.

President's Budget (PB)

The Federal Government's budget for a particular fiscal year transmitted in January (first Monday after January 3rd) to the Congress by the President in accordance with the Budget and Accounting Act of 1921, as amended. Includes all agencies and activities of the executive, legislative and judicial branches (For FY 88/89, two-year budget for DoD submitted in January 1987.)

PRF Pulse Repetition Frequency.

PRG Program Review Group.

Prime Contractor

A contractor having responsibility for design control and delivery of a system or equipment such as aircraft, engines, ships, tanks, vehicles, guns and missiles, ground communications and electronic systems, ground support equipment, and test equipment.

Prioritize Targets

To identify and rank targets in priority fashion, based upon criteria such as type, predicted impact point, and predicted time of impact.

PRN

Pseudo Random Noise.

PRO

1. See Preplanned Response Options. 2. Plant Representative Office.

Probability of Damage

The probability that damage will occur to a target expressed as a percentage or as a decimal.

Probability of Detection

1. The probability that the search object will be detected under given conditions if it is in the area searched. 2. The probability an object will be detected given all known error and noise sources.

Probability of Discrimination

This is the probability that an object which is threatening will be correctly identified. The ability to discriminate between a potential target and a decoy is quantified by a "K" factor, in which the higher the numeric the greater the probability of discrimination (thus, a "0" K factor implies that the target is indistinguishable from the decoy).

Probability of False Alarm

1. For a single sensor this is the probability that an object will be detected when no object is present. 2. For discrimination, this is the probability that an object which is not a threatening object will be identified as one.

Probability of Kill

The lethality of a weapon system. Generally refers to armaments (i.e. missiles, ordnance, etc.) Usually the statistical probability that the weapon will detonate close enough to the target with enough power to disable the target. (Defense Systems Management College)

Probe

The air vehicle of the GSTS.

PROC

Procurement.

Process Data Sensitivity Label (PDSL) The sensitivity label for data contained in a process.

PROCMT

Procurement.

Procuring Contracting Officer (PCO) The individual authorized to enter into contracts for supplies and services on behalf of the government by sealed bids of negotiations who is responsible for overall procurement of the contract.

Prod

Production.

Producibility

The relative ease of manufacturing an item or system. This relative ease is governed by the characteristics and features of a design that enable economical fabrication, assembly, inspection, and testing using available manufacturing techniques.

Producibility Review A feasibility review of the design of a specific hardware item or system to determine the relative ease of producing it using available production technology considering the elements of fabrication, assembly, inspection, and test. This is a generic term for the concurrent engineering portions of MIL-STD 1521 system design reviews.

Producibility, Engineering, and Planning (PEP)

Applies to production engineering tasks to ensure a smooth engineering transition from development into production. PEP, a systems and planning engineering approach, assures that an item can be produced in the required quantities and in the specified time frame, efficiently and economically, and will meet necessary performance objectives within its design and specification constraints. As an essential part of all engineering design, it is intended to identify potential manufacturing problems and suggest design and production changes or schedule trade-offs which would facilitate the production process.

Producibility, Programming, and Issues Resolution Strategies (PPIRS)

A semi-annual document put out by the BMDO P&M community listing all the medium and higher P&M risk issues as prioritized and coordinated by the BMDO P&M Working Group.

Product Baseline

- 1. Established by the detailed design documentation for each configuration item. Normally includes Process baseline (type D spec), Material baseline (type E spec), type C spec, and drawings.
- 2. In configuration management, the initial approved technical documentation (including, for software, the source code listing) defining a configuration item during the production, operation, maintenance, and logistic support of its life cycle.

Product Configuration Identification

The current approved technical documentation which defines the configuration of a configuration item during the production, operation, maintenance, and logistics support phases of its life cycle and which prescribes that necessary for: (1) fit and function characteristics of a CI (Configuration Item); (2) the selected functional characteristics for production acceptance; and (3) the production acceptance test.

Product Improvement

Effort to incorporate a configuration change involving engineering and testing on end items and depot repairable components, or changes on other than developmental items to increase system or combat effectiveness or extend useful military life. Usually results from user feedback.

Product Manager

The individual, designated by a materiel developer, who is delegated authority and assigned responsibility for centralized management of a development/ acquisition program that does not qualify for system/program/project management.

Product Security (PRODSEC)

That physical security provided for selected DoD products (major, high cost, politically sensitive systems with significant military value) at Department of Defense contractor facilities to mitigate the risk of the government as a self-insurer. Defining and instituting product security during production are essential to the delivery of uncompromised systems.

Production Acceptance Test and Evaluation

T&E of production items to demonstrate that items procured fulfill the requirements and specifications of the procuring contract or agreements.

Production and Deployment

Normally the fourth phase in the acquisition process following Milestone III. Systems are procured, items are manufactured, operational units are trained, and the systems are deployed.

Production Baseline

The Acquisition Program Baseline (APB) approved at Milestone III, applicable to the effort in Phase III, Production and Deployment.

Production Control

The procedure of planning, routing, scheduling, dispatching, and expediting the flow of materials, parts, subassemblies, and assemblies within the plant from the raw state to the finished product in an orderly and efficient manner.

Production Feasibility

The likelihood that a system design concept can be produced using existing production technology while simultaneously meeting quality, production rate, and cost requirements.

Production Qualification Test (PQT)

A technical test conducted post MS III to ensure the effectiveness of the manufacturing process, equipment, and procedures. This testing also serves the purpose of providing data for the independent evaluation required for material release so that the evaluator can address the adequacy of the material with respect to the stated requirements. These tests are conducted on a number of samples taken at random from the first production lot, and are repeated if the process or design is changed significantly, and when a second or alternative source is brought on line. Program funding category -- Procurement.

Production Readiness

The state or condition or preparedness of a system to proceed into production. A system is ready for production when the producibility of the production design and the managerial and physical preparations necessary for initiating and sustaining a viable production effort have progressed to the point where a production commitment can be made without incurring unacceptable risks that will breach thresholds of schedule, performance, cost, or other established criteria.

Production Readiness Review (PRR)

A formal examination of a program to determine if the design is ready for production, production engineering problems have been resolved, and the producer has accomplished adequate planning for the production phase. Performed toward the end of FSD. (Defense Systems Management College)

Prograde Orbit

An orbit having an inclination of between 0° and 90° with the object moving in an easterly direction. (See Retrograde Orbit.)

Program

1. A DoD acquisition program. 2. As a verb, schedule funds to meet requirements and plans. 3. A major, independent part of a software system. 4. A defined effort funded by RDT&E and/or procurement appropriations with the express objective of providing a new or improved capability in response to a stated mission need or deficiency.

Program Acquisition Cost

The estimated cost of development (RDT&E), procurement, and system specific military construction (MILCON) necessary to acquire the defense system. RDT&E costs shall be accumulated from the point in time when the DoD acquisition program is designated by title as a program element or major project within a program element. MILCON costs shall include only those projects that directly support and uniquely identify with the system.

Program Baseline

See Acquisition Program Baseline.

Program Budget Decision (PBD)

Secretary of Defense decision documents that affirm or change dollar amounts or manpower allowances in the services' budget estimate submissions.

Program Change Decision

A decision by SECDEF issued in a prescribed format that authorizes changes in the structure of the FYDP.

Program Change Request

Prepared in a prescribed format, it is a proposal for out-of-cycle changes to data recorded in the approved FYDP.

Program Cost Categories

- Research, Development, Test, and Evaluation. Appropriations to fund the efforts
 performed by contractors and government activities, including procurement of end
 items, weapons, material, components, materials and services required for the
 development of equipment, material, computer application software, and its
 development and initial operational test and evaluation. RDT&E also funds the
 operation of dedicated R&D installations activities for the conduct of R&D
 programs.
- 2. Procurement. Appropriations to fund those acquisition programs that have been approved for production, and all costs integral and necessary to deliver a useful end item intended for operational use or inventory upon delivery.
- 3. Operations & Maintenance. Appropriations to fund expenses such as civilian salaries, travel, minor construction projects, operating military forces, training and education, depot maintenance, stock funds, and base operations support.
- 4. Military Personnel. Appropriations to fund costs of salaries and other compensation for active and retired military personnel and reserve forces based on end strength.
- 5. Military Construction. Appropriations to fund major projects such as bases, schools, missile storage facilities, maintenance facilities, medical/dental clinics, libraries, and military family housing.

Costs budgeted in the O&M and Military Personnel appropriations are considered expenses. Costs budgeted in the Procurement and Military Construction appropriations are considered investments. Costs budgeted in the RDT&E and Family Housing appropriations include both expenses and investments.

Program Decision Memorandum (PDM)

SECDEF's approval of Military Department or Defense Agency POM with tentative specific guidance. Issued in July every two years during biennial PPBS.

Program Development and Risk Reduction (PDRR)

The acquisition phase when major program characteristics and product designs are refined through extensive study and analysis, hardware development, test, and evaluation. The objective is to validate the choice of alternatives and to provide the basis for determining whether or not to proceed into Engineering and Manufacturing development (EMD).

Program Element (PE)

The 11 major force elements are subdivided into Program Elements. The program element is the basic building block of the FYDP. It is defined as "an integrated combination of men, equipment and facilities which together constitute an identifiable military capability of support activity." It identifies the mission to be undertaken and the organizational entities to perform the mission. Elements may consist of forces, manpower, materiel, services, and/or associated costs. The PE consists of seven digits ending with a letter indicating appropriate service.

Program Element Monitor (PEM)

Person within HQ USAF office who is directly responsible for a given program and all documentation needed to harmonize the program in the budget.

Program Evaluation Review Technique

A technique for management of a program through to completion by constructing a network model of integrated activities and events and periodically evaluating the time/cost implications of progress.

Program

Executive Officer (PEO)

A military or civilian official who has primary responsibility for directing several acquisition category I programs and for assigned Acquisition Category II, III, and IV programs. A Program Executive Officer has no other command or staff responsibilities within the Component, and only reports to and receives guidance and direction from the DoD Component Acquisition Executive.

Program Management The process whereby a single leader and team are responsible for planning, organizing, coordinating, directing, and controlling the combined efforts of participating/assigned civilian and military personnel and organizations in accomplishing program objectives. Provides centralized authority, responsibility, and point of contact for a specific acquisition program.

Program Management Plan The document developed and issued by the program manager which shows the integrated multi-functional time-phased actions and resources required to complete the task.

Program Management Agreement (PMA) The guiding agreement between the BMDAE and the SAEs covering the broad objectives, funding, and expectations of each Service with respect to a specific BMDO-funded activity.

Program Manager (PM) Program Objectives Memorandum (POM) A military or civilian official who is responsible for managing an acquisition program.

An annual memorandum in prescribed format submitted to the SECDEF in May by the DoD Component Head, which recommends the total resource requirements and programs within the parameters of the SECDEF's fiscal guidance. A major document in the PPBS; it ultimately becomes the Component's budget.

Program/Project Integrator (PI) The BMDO staff member assigned responsibility for integrating all tasks within a project. Single point-of-contact for information and activities involving a BMDO technology, NMD planning, or a TMD acquisition project.

Programmatic

Pertaining to the cost, schedule, and performance characteristics of an acquisition program.

Programming

The projection of activities to be accomplished and the resources that will be required for a specified period in the future. The process of preparing a program, especially in terms of quantitative, physical requirements, manpower, materiel, and facilities. The process of establishing and maintaining a program.

PROGRUS

Program Update Studies.

Project

1. Synonymous with program in general usage. 2. Specifically, a planned undertaking having a finite beginning and ending, involving definition, development, production, and logistics support of a major weapon or weapon support system or systems. A project may be the whole or a part of a program. Within the Navy, a Designated Project is a project which, because of its importance or critical nature, has been selected for intensified project management. 3. A planned undertaking of something to be accomplished, produced, or constructed, having a finite beginning and a finite ending.

Project Office

The office of the program manager and the point of contact with industry, government agencies, and other activities participating in the system acquisition process. (USASDC) (Note: USAF uses the term System Program Office).

Project Planning Guidance (PPG)

High level summary document that defines the work to be performed by each Executing Agent in support of the BMD program.

Project Summary Work Breakdown Structure (WBS) A summary WBS tailored to a specific defense materiel item by selecting applicable elements from one or more summary WBSs or by adding equivalent elements unique to the project (MIL-STD-881A).

Proliferation (Nuclear Weapons)

The process by which nations sequentially come into possession of, or acquire the right to determine the use of, nuclear weapons, thus enabling each to launch a nuclear attack upon another nation.

Proof of Principle (POP)

Technical demonstration and troop experimentation conducted with brassboard configuration, subsystems, or surrogate systems, using troops in a realistic field environment. The process examines the organization and operational concept, provides data to improve requirements and evaluation criteria, and provides data on which to base the decision to enter EMD (Army).

Proprietary Right

A broad contractor term used to describe data belonging to the contractor. This data could be intellectual property, financial data, etc. This category is not recognized by the Government when referencing technical data. (Defense Systems Management College Glossary)

Protection Priorities The aggregated value for each impact point prediction specifying the order of protection.

Prototype.

Proto

PRP Personnel Reliability Program (ILS term).

PRR See Production Readiness Review.

PS 1. Physical Security. 2. Product Service.

PSA Production Shakedown Availability.

PSAC President's Science Advisory Committee.

PSC 1. Principle Subordinate Command. 2. Periodic hydride Sorption Cooler.

3. Personnel Security Committee. 4. Protoflight Spacecraft Cryocooler.

PSCC Physical Security Control Center.

PSD Power System Demonstrator.

PSE Peculiar Support Element.

psi Pounds per Square Inch.

PSM Portable Space Model.

PSN 1. Packet Switching Node. 2. Public Switched Network.

PSP 1. Program Support Plan. 2. Program Security Plan.

PSRR Preliminary System Requirements Review.

PSS 1. Passive Sensor System. 2. Passive Surveillance Sensor (Project 1106 term).

PSSC Preliminary System Security Concept.

PSW Packet Switching.

PSYOP Psychological Operations.

PsyOps Psychological Operations.

PTBT Partial Test Ban Treaty.

PTDB Problem Tracking Data Base.

PTE Processor Test Environment.

PTI Pacific Telecom, Incorporated.

PTO Participating Test Organization.

PTPM Product Transition Procedure Manual.

PtSi Platinum Silicide.

PTV Propulsion Test Vehicle.

PTWG Producible Technology Working Groups.

Pu Plutonium.

Pulse Duration In radar, measurement of pulse transmission time in microseconds, that is, the time the

radar's transmitter is energized during each cycle.

Pulse Repetition Frequency

In radar, the number of pulses the occur each second. Not to be confused with transmission frequency which is determined by the rate at which cycles are repeated

within the transmitted pulse.

Pulsed Power

EMR

Radiated fields that have very high instantaneous peak field strengths or power density

but significantly lower average values.

Pumping The raising of the molecules or atoms of a lasant to an energy state above the normal

lowest state to produce laser light. This results when they fall back to a lower state.

Pumping may be done using electrical, chemical, or nuclear energy.

PUR Program Update Review (OSD term).

Purchase Order

(PO)

A contractual procurement document used primarily to procure supplies and nonpersonal

services when the aggregate amount involved in any one transaction is relatively small

(e.g., not exceeding \$10,000).

PV HCT Photovoltaic Mercury Cadmium Telluride.

PVB Project Validation Board (MILCON term).

PVO (PVO Strany) Russian organization formerly responsible for the air and space defense of their

homeland.

PVT Payload Verification Test.

pW Picowatt.

PWBS Program Work Breakdown Structure.

PWG Product Working Group.

PWR Pressurized Water Reactor.

PY Prior Year.

Pyrotechnic A mixture of chemicals which, when ignited, is capable of reacting exothermically to

produce light, heat, smoke, sound, or gas, and may be also used to introduce a delay into an explosive train because of its known burning time. The term excludes

propellants and explosives.

Q Quarter [of year].

Q&R Qualification and Reliability.

Q/FY (number)Quarter/Fiscal Year (number), e.g., 4Q/FY98.

QA Quality Assurance.

QAE Quality Assurance Evaluator.

QAMSP Quality Assurance Master Surveillance Plan.

QC Quality Control.

QDR Quadrennial Defense Review (US Congress/ DoD term).

QFR Question for Record.

QIP Quality Improvement Prototype.

QLD Quick Look Display.

QM 1. Queen Match. 2. Quartermaster.

QM/DX Queen Match/Discrimination Experiment.

QMB Quality Management Board.

QPP Quality Program Plan.

QPR Quality Program Review.

QPSR Quarterly Program Status Review.

QQPRI Qualitative and Quantitative Personnel Requirements Information.

QRA 1. Quartz Resonant Accelerometer 2. Quick Reaction Alert.

3. Quick Reaction Aircraft (US).

QRC Quick Reaction Capability.

QRG Quick Reference Guide.

QRM Quick Response Missile.

QRP 1. Quick Response Program (PATRIOT). 2. Quick Reaction Program,

QRP Radar Quick Reaction Program Radar.

QRS 1. Quartz Resonant Sensor. 2. Quick Reaction Software.

QSR Quadrennial Strategy Review.

Qtrly Quarterly.

Quad-D/ADI Quad-D/Advanced Discriminating Interceptor.

Qualification Test This test simulates defined environmental conditions with a predetermined safety factor,

the results indicating whether a given design can perform its function within the simulated environment of a system. The test usually is not conducted on models using

production tooling and processes.

Query A request for identification of a set of assets, expressed in terms of a set of criteria

which the identified item must satisfy.

Queue A store for a sequence of packets, or messages, which are waiting to be processed. A

transmit queue for instance is a store of packets waiting to be transmitted.

QWIP Quantum Well Infrared Photodetector.

R&A Reliability and Availability.

R&D Research and Development.

R&M See Reliability and Maintainability.

R-T See Real Time.

R/ASR Review as Required.

R/T Receive/Transmit.

R/W Read/Write.

R² 1. Recovery and Reconstitution. 2. Reporting Responsibility.

R²**P**² Rapid-Retargeting/Precision Pointing (simulator).

Rotary Reciprocating Refrigerator.

RAA See Risk Approval Authority.

RAAF Royal Australian Air Force.

RACE Research in Advanced Communications in Europe.

RAD 1. Radiation Absorbed Dose. 2. Radiation Accumulated Dose. 3. Radiation.

Rad Hard Radiation Hardened.

Radar (Formerly an acronym for Radio Detection and Ranging.) A technique for detecting

targets in the atmosphere or in space by transmitting radio waves (e.g., microwaves) and sensing the waves reflected by objects. The reflected waves (called "returns" or "echoes") provide information on the distance to the target and the velocity of the

target, and also may provide information about the shape of the target.

Radar Beacon A receiver-transmitter combination which sends out a coded signal when triggered by

the proper type of pulse, enabling determination of range and bearing information by the

interrogating station or aircraft.

Radar Cross Section (RCS) Area of an object as scanned by a radar; measured in square meters.

Radar Netting The linking of several radars to a single center to provide integrated target information.

RADC 1. Region Air Defense Commander. 2. OBSOLETE. Rome Air Development Center.

(Now called Rome Laboratory.)

RADEC Radiation Detection Capability.

RADHAZ 1. Electromagnetic Radiation Hazard. 2. Hazards form electromagnetic radiation.

Radiant Exposure The total amount of thermal radiation energy received per unit area of exposed surface;

it is usually expressed in calories per square centimeter.

Radiation

1. The emission and propagation of waves transmitting energy through space or through some medium; for example, the emission and propagation of electromagnetic, sound, or elastic waves. 2. The energy transmitted by waves through space or some medium; when unqualified, usually refers to electromagnetic radiation. Also known as radiant energy. 3. A stream of particles, such as electrons, neutrons, protons, alpha-particles, or high-energy photons, or a mixture of these. (See Ionizing Radiation, Nuclear Radiation, and Thermal Radiation.)

Radiation Hardening Protection of a particular system, subsystem, or component from functional damage due to the effects of nuclear (or other) radiation by shielding the vulnerable components from the radiation, or using other passive techniques in manufacturing effects of nuclear (or other) radiation.

RADIC System

Rapidly Deployable Integrated Command and Control System.

RADINT

Radar Intelligence.

Radio Blackout (RBO)

The complete disruption of radio (or radar) signal over large areas caused by the ionization accompanying a high altitude nuclear explosion, especially above about 40 miles.

Radioactive (or Nuclear) Cloud An all-inclusive term for the volume of hot gases, smoke, dust, and other particulate matter from the nuclear weapon itself and from its environment, that is carried aloft in conjunction with the rising fireball produced by the detonation of a nuclear weapon.

Radioactivity

The spontaneous emission of radiation, generally alpha or beta particles, often accompanied by gamma rays, from the nuclei or an unstable isotope.

RADOT

Recording Automatic Digital Optical Tracker, part of the suite of sensors at KREMS.

RAG

Red-Amber-Green (BMDO/POC assessment term).

Rail Gun (RG)

A weapon using metallic rails and electromagnetic energy to fire hypervelocity projectiles.

RAM

- 1. See Reliability, Availability, and Maintainability.
- 2. Random Access Memory. 3. Radar Absorption Material.

RAMA

Reliability, Availability, Maintainability Analysis.

RAMOS

1. Russian-American Observation Satellite. 2. Reliability, availability, maintainability, operations, and support.

RAMS

Resource Management Accounting System.

Random Defense

Engagement of RVs uniformly without any reference to type or destination. This implies taking the best shot possible in terms of increasing probability to kill.

Range Resolution

The difference between the true distance (from sensor) to target and the calculated distance to target based on sensor data, at maximum sensor range.

RAP

Remote Access Panel.

RAPIER

Rapid Emergency Relocation Team.

RAPTOR

Responsive Aircraft Program for Theater Operations. A high-altitude, long endurance airborne sensor platform.

234

RAPTOR/TALON A technology demonstration program to demonstrate critical technologies for an

unmanned airborne weapons system providing a boost phase intercept capability.

RARSAT Radar Ocean Reconnaissance Satellite.

RAS 1. Requirements Allocation Sheet. 2. Remote Access Set.

RASA Remote Command Safety System.

Rationalization Any action that increases the effectiveness of allied forces through more efficient or

effective use of defense resources committed to the alliance. Rationalization includes consolidation, reassignment of national priorities to higher alliance needs, standardization, specialization, mutual support or improved interoperability, and greater cooperation. Rationalization applies to both weapons/materiel resources and non-

weapons military matters.

RB Reentry Body.

RBECS Revised Battlefield Electronic CEOI System (USA-sponsored).

RBO See Radio Blackout.

RC/CC Responsibility Center/Cost Center.

RCF Radar Correlation Function.

RCM 1. Reliability Centered Maintenance. 2. Requirements Correlation Matrix (AF).

3. Resource Consumption Model.

RCR Rate Capability Review (USA term).

RCS See Radar Cross Section.

RCSR Radar Cross Section Reduction.

RCSS Range Command Safety System.

RCU 1. Rate Changes Unit. 2. Remote Control Unit. 3. Reactor Control Unit.

RCVR Receiver.

RD Readiness Demonstrator (SBL Program term).

RDA 1. Research, Development and Acquisition. 2. Round Design Agent.

RDBMS Relational Database Management System (Computer term).

RDC Research and Development Contract.

RDD Requirements Driven Design.

RDD-100 Requirements Driven Development.

RDG Random Data Generator.

RDS 1. See Regional Defense System. 2. Real-Time Digital Simulator.

RDT&E

See Research, Development, Test, and Evaluation.

RDT&E Program Categories

The five divisions the comprise Major Force Program 06 (R&D) in the FYDP. They are:

- 6.1 Basic Research
- 6.2 Exploratory Development
- 6.3 Advanced Development
- 6.4 Engineering Development
- 6.5 Management and Support.

Operational System development, not a designated category, is funded in RDT&E appropriations but not in Major Force Program 06.

RE

Radar Enhancement (USA term).

Re-Targeting

The ability of the system to recompute the direction of sensors and/or weapons to intercept a target that was missed on the first attempt, or that was superseded by a higher priority target.

REACT

Rapid Execution and Combat Targeting.

Reaction Decoy

A decoy deployed only upon warning or suspicion of imminent attack.

Readiness Postures

A specific status defining the relative responsiveness of BMD assets and personnel to perform a USSPACECOM BMD mission.

Real Time (R-T)

1. Pertaining to the timelines of data or information which have been delayed only by the time required for electronic communication. This implies that there are no noticeable delays. 2. Pertaining to the actual time during which a physical process transpires, for example, the performance of a computation during the actual time that the related physical process transpires, in order that results of the computation can be used in guiding the physical process.

Real World Data

Data derived from physical experimentation concerning phenomenology associated with technical functioning of SDS, particularly regarding target signatures, background observables, sensor functions, weapon functions, and survivability.

Real World Data Collection The provision, to SEIC users, of access to real world data, in fashion timely and otherwise suitable to meet users' needs (e.g. for validation of a test bed).

REC Radio-Electronic Combat.

RECCE Reconnaissance.

Reclama A formal appeal to the service comptroller of SECDEF's tentative budget decision on

the service budget estimates.

RECON Reconnaissance.

Reconciliation Directives to standing committees contained in congressional budget resolutions calling

for certain dollar savings and a deadline for reporting legislation to achieve the savings. Omnibus reconciliation bill incorporating these changes is introduced and acted on in

both houses.

ReconstituteTo restore, during periods of hostile engagements or during peacetime, military forces or

elements as closely as possible to a desired state of readiness for combat.

Red/Blue Exchange A process to identify and define potential countermeasures that would degrade aspects of ballistic missile defense. The process -- akin to a wargame -- pits a Red team fielded by DSIM and a Blue team fielded by AQ. A senior review panel acts as the referee.

REDCAP

Real-time Electromagnetic Digitally Controlled Analyzer and Processor (USAF term)

Redout

The degradation of infrared sensor resolution due to high-altitude nuclear bursts. Radiation from these bursts causes fluorescence-emission of light from air molecules. The emitted light lies within the long-wave IR spectrum so the atmosphere below appears to the sensor to glow more brightly than usual.

Redundancy

The inclusion of duplicate or alternate system elements to improve operational reliability by ensuring continued operation in the event that a primary element fails.

Reengineering

The process of examining, altering, and re-implementing an existing computer system to reconstitute it in a new form.

Reentry

The return of objects, originally launched from earth, into the atmosphere.

Reentry Angle

Elevation angle of velocity vector relative to local horizontal plane when reentering object reaches 92km.

Reentry Phase

That portion of the trajectory of a ballistic missile or space vehicle where there is a significant interaction of the vehicle and the earth's atmosphere.

Reentry Vehicle (RV)

1. Reentry vehicles are objects containing nuclear warheads. They are released from the last stage of a booster rocket or from a post-boost vehicle early in the ballistic trajectory. They are thermally insulated to survive rapid heating during the high velocities of reentry into the atmosphere, and are designed to protect their contents until detonation at their targets. 2. That part of a space vehicle designed to re-enter the Earth's atmosphere n the terminal portion of its trajectory.

Regional Defense System (RDS) That portion of the Strategic Defense System that provides defense for a specific geographic region, such as the European Theater.

Regional Operations Center (ROC) A group of fixed and/or mobile centers with OPCON over allocated ground based sensors and weapons.

Regional Operations Control Center (ROCC) The command function for CONUS, Canadian and Alaska NORAD Regions, referred to as "regions." In the Alaska NORAD region, the ROCC is also the central intelligence, communications and operations control center established for the purpose of supervising and coordinating the combat effort of all air defense forces made available to the Alaska NORAD region commander. Under normal operating conditions (not degraded), the ROCC is responsible for the identification function and for air and ballistic missile defense of North America.

Regrade

To determine that certain classified information requires, in the interests of national security, a higher or lower degree of protection against unauthorized disclosure than currently provided, coupled with a changing of the classification designation to reflect such higher or lower degree.

REL NAV

Relative Navigation (JTIDS term).

Relay Mirror

Part of a ground-based laser system.

Reliability and Maintainability (R&M) Reliability and maintainability design parameters are key factors in the design of affordable and supportable systems. R&M parameters provide inputs into the design and LSA processes that quantitatively link system readiness to the ILS elements. One of the principal elements of ILS.

Reliability, Availability, and Maintainability (RAM) Those requirements imposed on acquisition systems to ensure they are operationally ready for use when needed, will successfully perform assigned functions, and can be economically operated and maintained within the scope of logistics concepts and policies. RAM programs are applicable to materiel systems, test measurement and diagnostic equipment, training devices, and facilities developed, produced, maintained, procured, or modified for use. (See individual definitions for Reliability, Availability, and Maintainability.)

REM Roentgen Equivalent Man.

Remotely Piloted Vehicle (RPV) An unmanned vehicle capable of being controlled from a distant location through a communication link. It is normally designed to be recoverable. See also Drone.

REP Resources Enhancement Program. A program under the CTEIP program which funds near term operational test realism and other needs.

Repairability The probability that a failed system will be restored to operable condition within a specified active repair time.

Repeater-Jammer A receiver transmitter device that amplifies, multiplies and retransmits the signals received, for purposes of deception or jamming.

Report Back Information returned from system elements that verify that directions have been received and carried out. Also includes information regarding system effectiveness.

Reprogrammable Time

Time required to retarget an alert missile.

ReprogrammingThe transfer of funds between program element or line items within an appropriation for purposes other than those contemplated at the time of appropriation. Reprogramming is generally accomplished pursuant to consultation with and approval by appropriate congressional committees.

Request for Proposal (RFP) A solicitation used in negotiated acquisition to communicate government requirements to prospective contractors and to solicit proposals.

Request for Quotation A solicitation used in negotiated acquisition to communicate government requirements to prospective contractors and to solicit a quotation. A response to an RFQ is not an offer. It is informational in character.

Required Operational Capability (ROC) OBSOLETE. A document stating need and specific operational capability. Replaced by the Operational Requirements Document (Army, USMC). See Operational Requirements Document.

Required Operational Characteristics System parameters that are primary indicators of the system's capability to be employed to perform the required mission functions, and to be supported.

Required Technical Characteristics

Quantitative system performance parameters, approved by the DoD Component, that are selected as primary indicators of technical achievement of engineering thresholds. These might not be direct measures of, but should always relate to, a system's capability to perform its required mission function and to be supported. Required technical characteristics are usually tested and evaluated by developmental testing and evaluation (DT&E) to ascertain achievement of approved goals and thresholds for these characteristics. Critical technical characteristics selected for a DAB program baseline are reviewed and further approved through the DAB process.

Requirements Analysis

An analysis to determine and document the need for resources to perform the agency's mission.

Requirements Document

A document that sets forth the requirements for a system or system component; for example, a software configuration item. Typically included are functional requirements, performance requirements, interface requirements, design requirements, and development standards.

RES

- 1. Remote Engagement Section (HAWK TBM weapons system term).
- 2. Resolution.

RESA

1. Research, Evaluation, and Systems Analysis simulation facility (USN), San Diego, CA. 2. Radar Environment Status Assessment Algorithm.

Rescission

An action by the President canceling budget authority previously appropriated but not yet obligated or spent. If both Houses of Congress do not approve the proposed rescission within 45 days, the President must obligate the BA as intended by Congress.

Research and Development Costs

Those program costs primarily associated with R&D efforts including the development of a new or improved capability to the point where it is ready for use. They include equipment costs funded under RDT&E appropriations and related military construction appropriation costs. They exclude costs that appear in the military personnel, operation and maintenance, and procurement appropriations.

Research, Development, Test, and Evaluation (RDT&E) Activities for the development of a new system that include basic and exploratory research, advanced and engineering development, development and operational testing and the evaluation of test results. Also, an appropriation category that includes funds allocated to the FYDP major force program 6. (Defense Systems Management College)

Resident Space Object (RSO)

Object which is currently on-orbit and whose element set parameters are maintained by the Cheyenne Mountain Complex.

RESOL

Resolution.

Resolution

1. The ability of a sensor to measure the separation of an image into its constituent objects so that single objects are visible and distinguishable. 2. A measurement of the smallest detail that can be distinguished by a sensor system under specific conditions.

Response Plan Selection

The continual comparison of the nature of the observed threat with the defense system capabilities and selects the best way to attack the threat in accordance with established priorities and specified strategy.

Responsive Threat

The threat after taking into account modernization and countermeasures introduced to offset the capabilities of the SDS.

Restitution

The process of determining the true planimetric position of objects whose images appear on photographs.

Retrofit Action Action taken to modify inservice equipment.

Retrograde Orbit An orbit having inclination of 0 to 90 degrees (See Prograde Orbit).

Reverse The process of analyzing a computer system's software to identify components and their **Engineering**

interrelationships.

REVIC Revised Enhanced Version of Intermediate COCOMO (Computer term).

Revisit Interval The time that elapses between successive observations of an object from a single sensor.

REX/TTG Receiver Exciter/Test Target Generator.

RF 1. Radio Frequency. 2. Response Force.

RFFEL Radio Frequency Free Electron Laser

RFI 1. Request for Issue. 2. Request for Information.

3. Radio Frequency Interference.

RFL Radio Frequency Linac.

RFLINAC Radio Frequency Linear Accelerator.

RFOG Resonant Fiber Optic Gyro.

RFP Request for Proposal.

RFQ 1. Radio Frequency Quadrupole (Accelerator). 2. Request for Quotation.

RG 1. See Rail Gun. 2. Review Group.

RGB Red, Green, Blue (Video Engineering term).

RH Radiation Hardened.

RH Electronics Radiation Hardened Electronics.

RHD Radiation Hardened Device.

RHETT II 1. Russian Hall Effect Thruster Technology Program.

2. Russian Hall Electric Thruster Test.

R, Inherent Reliability.

RIA Range Insensitive Axes.

RIBIT Reverse Illuminated Blocked Impurity Transducer.

RICBM Retro Intercontinental Ballistic Missile.

RIIA Royal Institute of International Affairs (UK).

RIL Repair Items List (ILS term).

RINT Unintentional Radiation Intelligence. **RIS** Radar Integration System.

RISC Reduced Instruction Set Computer.

RISCAE RISC Ada Environment.

Risk Approval Authority (RAA) An individual designated by the Director, BMDO who makes risk acceptance decisions. The RAA evaluates trade-offs between threats and such factors as cost, security, survivability, and safety to achieve a functionally operational, affordable, and secure

system.

Risk Assessment The process of subjectively determining the probability that a specific interplay of

performance, schedule, and cost as an objective, will or will not be attained along the

planned course of action. (Defense Systems Management College)

RISTA Reconnaissance, Intelligence, Surveillance, and Target Acquisition.

RIU Range Interface Unit.

Rivet Joint RC-135 reconnaissance aircraft.

RIVET JOINT Name of USAF Reconnaissance project.

RIW Reliability Incentive Warranty.

RL 1. Rome Laboratory, Griffiss AFB, NY. (Formerly called Rome Air Development

Center.). 2. Remote Launch (USA PAC-3 term).

RLA Repair of Level Analysis (ILS term).

RLG Ring Laser Gyro.

RLRIU Routing Logic Radio Interface Unit (PATRIOT).

RLRIU-U Routing Logic Radio Interface Unit - Upgrade (USA term).

R_m Mission Reliability (ILS term).

RM Radioman (USN term).

RMA 1. Reliability, Maintainability and Availability (see RAM) (ILS term).

2. Revolution in Military Affairs (OSD term).

RMCET Resource Management Concurrent Engineeering Team.

RME 1. Relay Mirror Experiment (a satellite launched February 1990 and which reentered the

atmosphere in May 1993). 2. Remote Multiplexer Encoder.

RMI Republic of the Marshall Islands.

RMO Reflectivity.

RMP Risk Management Plan.

RMS 1. Remote Manipulator System. 2. Root Mean Square.

3. Resource Management System.

RNAS REL NAV Analytic Simulator (JTIDS term).

RNLAF Royal Netherlands Air Force.

RNLN Royal Netherlands Navy.

ROB Remote Operating Base.

ROBS Rapid Optical Beam Steering.

Robust Used in describing a system; indicates its ability to endure and perform its mission

against a responsive threat. Also used to indicate system ability to survive under direct

attack.

Robustness 1. The ability to produce correct results despite input errors. 2. The existence of

coordinated, multiple capabilities that perform the same broad task/mission. Provides the BMD warfighter with sufficient flexibility to negate the specified threat with application of a variable mix of ground and space-based systems. (USSPACECOM)

ROC 1. See Regional Operations Center. 2. Required Operational Capability.

ROCC See Regional Operations Control Center.

ROD Record of Decision.

ROE See Rules of Engagement.

ROF Rate of fire.

ROI Return on Investment.

ROK Republic of Korea.

ROM 1. Rough Order of Magnitude. 2. Read Only Memory.

ROOM Real-time Object-Oriented Methodology.

RORSAT Radar Ocean Reconnaissance Satellite.

ROV Remotely-Operated Vehicle.

ROW Rest-of-World.

RP 1. Repetitive Pulse. 2. Readiness Posture.

RP&C Resource Planning and Coordination.

RPAC Resource Performance Analysis Center.

RPIE Real Property Installed Equipment.

rpm Revolutions per minute.

RPV Remotely Piloted Vehicle.

Rqmt Requirement.

RQMTS Requirements.

RQn Review Question (AFMC term).

RRFD Risk Reduction Flight Demonstration.

RRG Requirements Review Group.

RS 1. Radar Set (PATRIOT). 2. Readiness Station (USA term). 3. Roving Sands.

RSA Russian Space Agency.

RSAV Resupply/ammunition vehicle.

RSE Range Systems Engineering, a Raytheon company.

RSI Rationalization, Standardization, and Interoperability.

RSIP Radar System Improvement Program.

RSO See Resident Space Object.

RSOI Reception, Staging, Operation and force Integration (Joint Forces term).

RSRE Royal Signal and Radar Establishment (UK).

RST 1. Radar System Test (THAAD-GBR).

RSTA Reconnaissance, Surveillance, and Target Acquisition.

RSTER Radar Surveillance Technology Experimental Radar (UHF).

RSU 1. Remote Switching Unit. 2. Recovery Storage Unit.

RSV Resupply vehicle.

RT 1. Relocation Time (ILS term). 2. Repair Time (ILS term).

RTC Report to Congress.

RTCA Real Time Casualty Assessment (USA term).

RTD 1. Radar Technology Demonstration. 2. Repair Task Distribution (ILS term).

RTF Release To Fleet (USN term).

RTG Radioisotope Thermoelectric Generator.

RTIM Radar Technology Identification Methodology.

RTO Responsible Test Organization.

RTOV Real Time Operational Verification.

RTOVF Real Time Operational Verification Facility (USA term).

RTS 1. Request To Send (TelComm/Computer term). 2. Remote Tracking Station.

RTWP Real Time Wave form Processor (Advanced Technology Demonstration Radar term).

Rules of Engagement (ROE) Directives issued by competent military authority which delineate the circumstances and limitations under which United States forces will initiate and/or continue combat

engagement with other forces encountered.

RUPS Resource User ID and Password System.

RUSI Royal United Services Institute (UK).

RV See Reentry Vehicle.

RV Complex A reentry vehicle and its associated objects.

RV Temperature The temperature of the heat given off by the RV, that allows sensors to acquire them.

RVAO Reentry Vehicle Associated Objects.

Rvw Review.

RW 1. Radiological Weapon. 2. Rotary Wing.

RWPD Real Time Waveform Processing Demonstration.

RWR Radar Warning Receiver.

RWS Remote Workstation.

RX 1. Receive. 2. Receiver.

S Start.

S&A Safe and Arm.

S&T Science and Technology.

S&TI Scientific and Technical Intelligence.

S&TNF Strategic and Theater Nuclear Forces.

S/N 1. See Signal-to-Noise Ratio (Also called SNR). 2. Serial Number.

S/NF Secret/No Foreign Security Marking.

S/O Survivability/Operability.

S/SU/AC System/System Upgrade/Advanced Concept.

S/T Search/Track.

S/V Survivability and Vulnerability.

S/W Software.

Synchronized and Synergized.

Space-Based KEW System Simulator/Emulator.

SA 1. Situation Awareness 2. Secretary of the Army. 3. Site Activation.

4. Surface-to-Air.

SA&I System Architecture and Integration.

SA-N- Surface-to-Air, Naval.

SA/BM OBSOLETE. Systems Analysis/Battle Management.

SA/PDL Strategic Defense Ada Process Description Language.

SAAWC Sector Anti-Air Warfare Coordinator (USMC).

SAAWF Sector Anti-Air Warfare Facility (USAF term).

SABRS Space and Atmospheric Burst Reporting System.

SAC 1. OBSOLETE. Strategic Air Command (see USSTRATCOM).

2. Senate Appropriations Committee (US).

SACCS SAC Control System.

SACEUR Supreme Allied Command, Europe.

SACLANT Supreme Allied Command, Atlantic.

SACMA Suppliers of Advanced Composite Materials Association.

SADA Standard Advanced Dewar Assembly.

SADBU Small and Disadvantaged Business Utilization [of OSD].

SADM System Acquisition Decision Memorandum (Army).

SADO Senior Operations Duty Officer (JFACC term).

SAE See Service Acquisition Executive.

SAFEGUARD A U.S. midcourse and terminal phase defense for ICBMs, deployed in 1975 and

deactivated in 1976 due to its limited cost effectiveness.

SAFSCOM OBSOLETE. SAFEGUARD System Command.

SAG 1. Senior Advisory Group. 2. Study Advisory Group (USA term).

SAGE Semi-Automatic Ground Environment [Air Defense System].

SAH Semi-active homing.

SAIC Scientific Applications International Corporation.

Saint A satellite inspector system designed to demonstrate the feasibility of intercepting,

inspecting, and reporting on the characteristics of satellites in orbit.

SAINT 1. Satellite Interceptor. 2. Shared Adaptive Internet Technology.

SAIP Semi-Automated Imagery Processing.

SAKT System Architecture and Key Tradeoffs (SDIO term).

SAL Strategic Arms Limitation.

SALT Strategic Arms Limitation Talks.

Salvage Fusing The means by which a warhead detonates when it is structurally attacked by an

interceptor. Generally used as a device for disruption of the defense.

SAM Surface-to-Air Missile.

SAM-D Surface to-Air Missile, Model D (now PATRIOT).

SAMD Security Assistance Management Division.

SAMM Software Acquisition Maturity Matrix.

SAMMES Space Active Modular Materials Experiment.

SAMOPA Single Accelerator Master Oscillator-Power Amplifier.

SAMOS Satellite and Missile Observation System.

SAMP 1. Single Acquisition Management Plan.

2. Security Accreditation Management Plan.

SAMP/T Sol-Air Moyenne Portee/Terre (Surface-Air Medium Portable/Terrestrial - French-Italian

missile).

SAMS Spacecraft Assembly, Maintenance and Servicing Study.

SAMTEC OBSOLETE. Space and Missile Systems Test Center, Vandenberg AFB, CA.

SAMTO OBSOLETE. Space and Missile Test Organization, Vandenberg AFB, CA.

SAO Security Assistance Organization.

SAP 1. Special Access Program. 2. Site Activation Plan (ILS/MILCON term).

SAR 1. See Synthetic Aperture Radar. 2. Selected Acquisition Report. 3. Special Access

Required. 4. Search and Rescue.

SARDA [Assistant] Secretary of the Army for Research, Development and Acquisition.

SAS 1. Shoot-Assess-Shoot. 2. System Architecture Study (SDI).

3. Single Audio Switch.

SASC Senate Armed Services Committee (US).

SASET Software Architecture Sizing and Estimating Tool.

SASS Space Assets Support System.

SAT 1. Surveillance, Acquisition and Tracking. 2. Studies, Analysis and Technology.

SATAN Security Administrator's Tool for Analyzing Networks.

SATCOM Satellite Communications.

Satellite and Missile Surveillance The systematic observation of aerospace for the purpose of detecting, tracking, and characterizing objects, events, and phenomena associated with satellites and in-flight missiles, both friendly and enemy.

Satellite Reconnaissance Intelligence gathered through collection systems involved in assessing the capabilities, methods of operation, signal intercept, photo reconnaissance, and other intelligence indications and warnings that will provide information for SDS assets.

SATKA Surveillance, Acquisition, Tracking, and Kill Assessment.

SATP Space Applications Technology Program.

SATRAK Satellite Tracking.

SATURN Name of NASA rocket booster.

SATVUL Satellite Vulnerability.

SAW 1. Surface Acoustic Wave. 2. Satellite Attack Warning.

SAW/V Satellite Attack Warning and Verification.

SAWAFE Satellite Attack Warning and Assessment Flight Experiment.

SBA 1. Space-Based Assets. 2. Small Business Administration.

SBAMS Space-Based Anti-Missile System.

SBAS 1. See Space-Based Architecture Study. 2. Space-Based Acquisition System.

SBCL Space-Based Chemical Laser.

SBD 1. Site BMC3 Demonstrator. 2. Schematic Block Diagram.

SBE 1. Space-Based Element. 2. Synthetic Battlefield Environment.

SBES Space-Based Experimental System.

SBEV Space-Based Experimental Version.

SBFEL Space-Based Free Electron Laser.

SBHE Space-Based Hypervelocity Gun Experiment.

SBHRG Space-Based Hypervelocity Rail Gun.

SBI 1. Space-Based Interceptor. (Replaced by Brilliant Pebbles (BP).)

2. Special Background Investigation.

SBI-CV OBSOLETE. Space-Based Interceptor - Carrier Vehicle.

SBIR 1. Space-Based Infrared. 2. Small Business Innovative Research.

SBIRS See Space Based Infrared System.

SBIRS GEO SBIRS Geosynchronous Earth Orbit satellites.

SBIRS HEO SBIRS infrared sensors hosted on satellites in Highly Elliptical Orbits.

SBIRS High SBIRS high altitude component consisting of four SBIRS GEO satellites and infrared

sensors on two HEO satellites.

SBIRS LEO SBIRS Low Earth Orbit satellites.

SBIRS Low SBIRS low altitude component consisting of SBIRS LEO satellites. The SBIRS Low

component will be designed to provide precision midcourse tracking and discrimination data to support early interceptor commit, in-flight target updates, and target object maps for a National Missile Defense architecture. The SBIRS Low component will also support the other mission areas of the SBIR system. (Evolution of the Space and

Missile Tracking System)

SBIS 1. Space-Based Imaging Satellite. 2. Space-Based Interceptor System.

3. Sustaining Base Information Services (USA term).

SBKEW Space-Based Kinetic Energy Weapon.

SBKKV OBSOLETE. Space-Based Kinetic Kill Vehicle.

SBKV Space-Based Kill Vehicle.

SBL Space-Based Laser.

SBLRD Space-Based Laser Readiness Demonstrator.

SBM 1. Space-Based Battle Manager. 2. Strategic Ballistic Missile.

SBNPB Space-Based Neutral Particle Beam.

SBNPBW Space-Based Neutral Particle Beam Weapon.

SBPB Space-Based Particle Beam.

SBR Space-Based Radar.

SBRF Space-Based Radio Frequency.

SBS Stimulated Brillouin Scattering.

SBSim Space-Based Simulator.

SBSS 1. Space-Based Surveillance System. 2. Standard Base Supply System.

SBV Sensor Space-Based Visible Sensor.

SBWAS Space-Based Warning System.

SBWS Space Based Warning System.

SC 1. See System Center. 2. System Concept. 3. Simulation Center.

4. System Controller. 5. Stress Compensated.

SC/BM System Concepts/Battle Management.

Scaling Law A mathematical relationship which permits the effects of a nuclear (or atomic)

explosion of given energy yield to be determined as a function of distance from the explosion (or from ground zero), provided the corresponding effect is known as a

function of distance for a reference explosion (e.g., of 1-kiloton energy yield).

Scan In an electro-magnetic or acoustic search, one complete rotation of the antenna.

Scan Type The path made in space by a point on the radar beam; for example, circular, helical,

conical, spiral, or sector.

SCARLET Solar Concentrator Arrays with Refractive Linear Element Technology.

Scattering The diversion of radiation, including radio, radar, thermal, and nuclear, from its original

path as a result of interactions (or collisions) with atoms, molecules, or larger particles in the atmosphere or other medium between the source of the radiations (e.g., a nuclear explosion) and a point at some distance away. As a result of scattering, radiation (especially gamma rays and neutrons) will be received at such a point from many

directions instead of only from the direction of the source.

SCB Strategic Defense System Control Board.

SCC 1. Standing Consultative Commission (Treaty negotiation related term).

2. Space Control Center.

SCCB See System Configuration Control Board.

SCCC Service Component Command Center.

SCDL Surveillance Control Data Link.

SCE 1. Submunition Chemical Experiment. 2. Software Capability Evaluation.

3. System Cost Estimate.

SCF Satellite Control Facility.

SCG Security Classification Guide.

SCI Special Compartmented Information (Security term).

SCIF Sensitive Compartmented Information Facility (Security term).

SCIT Systems Concept Integrated Technology.

SCMP Software Configuration Management Board.

SCN 1. Specification Change Notice. 2. Ship Construction and Conversion (Navy). 3.

Space Communications Network. 4. Satellite Control Network (USAF term).

SCOMP Secure Communications Processor.

SCOPA Survivable Concentrating Photovoltaic Array.

SCORE Scientific Cooperative Research Exchange (US-UK). A science exhange program to

investigate theater missile defense related issues.

SCP See System Concept Paper.

SCR Special Contract Requirement.

SCSI Small Computer Systems Interface.

SCT Single Channel Transponder.

SCUD Surface-to-Surface Missile System.

ScudCAP Scud-Combat Air Patrol.

SD Strategic Defense Command (Army term) (See also SDC).

SDB 1. System Design Board. 2. Small Disadvantaged Business.

SDC Strategic Defense Command (USA term).

SDCC 1. Strategic Defense Command Center. 2. Space Defense Control Center.

SDCE Software Development Capability Evaluation (AFMC term).

SDCV Shuttle Derived Cargo Vehicle.

SDD 1. System Description Document. 2. Software Design Document.

SDF 1. Self Defense Force. 2. Software Development File.

SDI OBSOLETE. Strategic Defense Initiative.

SDIAE OBSOLETE. SDI Acquisition Executive. (Retitled BMD Acquisition Executive

(BMDAE).)

SDIARC OBSOLETE. Strategic Defense Initiative Acquisition Review Council.

SDII OBSOLETE. SDI Institute.

SDIO OBSOLETE. Strategic Defense Initiative Organization. (Predecessor organization to

Ballistic Missile Defense Organization (BMDO).)

SDIO/PP Strategic Defense Initiative Organization/Program Planning.

SDIP OBSOLETE. Strategic Defense Initiative Program. (Predecessor program to Ballistic

Missile Defense Program.)

SDISM OBSOLETE. SDI Simulation.

SDL Software Development Library.

SDLC Synchronous Data Link Control (TelComm/Computer term).

SDLS Satellite Data Link Standard(s).

SDN System Design Notebook.

SDP Software Development Plan.

SDR 1. See System Design Review. 2. Software Design Review.

3. System Design Requirements.

SDRU System Design Review Update.

SDS 1. See Strategic Defense System. 2. Self Defense Suite.

SDS Element A stand alone system (e.g., a weapon or satellite) which is the smallest entity capable

of performing a designated function with specified results within the Strategic Defense

System.

SDS-CC Strategic Defense System - Command Center.

SDS-OC Strategic Defense System - Operations Center.

SDSD Strategic Defense System Description.

SE 1. See Systems Engineering. 2. Support Equipment.

SE&I Systems Engineering and Integration.

SE-CPAT Systems Engineering - Critical Process Assessment Tool (AFMC term).

SEA [Military] Service Executing Agent.

SEAD Suppression of Enemy Air Defenses.

SEALs Sea Air Land (Special Operations) forces (USN).

Search, Active Illuminate an assigned volume of space with electromagnetic energy and collect

reflected radiation.

Search, Passive Collect radiation from an assigned volume of space.

SEATO Southeast Asia Treaty Organization.

SECC See Survivable and Enduring Command Center.

SECDEF Secretary of Defense (For Message Use Only).

SECNAV Secretary of the Navy.

SECNAVINST Secretary of the Navy Instruction.

Second Strike Capability

The ability to survive a first strike with sufficient resources to deliver an effective counterblow (generally associated with nuclear weapons).

Secondary Station A station that has been selected to receive a transmission from the primary station. The

assignment of secondary status is temporary, under control of the primary station, and

continues for the duration of a transmission.

Security Subsystem That part of a weapon or defense system which is added specifically for the performance

of security functions and not categorized as components of other subsystems.

Security Architecture The portion of the baseline SDS architecture that is responsible for preserving the confidentiality, integrity, and assured service of any of the sensitive, system-valued

functions and information elements (assets).

Security Criteria The set of requirements that should be met so the security system can provide a

maximum degree of effective deterrence at the lowest cost.

Security Level The combination of hierarchical classification and a set of non-hierarchical categories

that represents the sensitivity of information.

Security Policy The set of laws, rules, and practices that regulate how an organization manages,

protects, and distributes sensitive information.

Security Policy Model An informal presentation of a formal security policy model.

Security Program The implementation of formal security policies and procedures established by DoD and

other departmental publications to secure vital components of weapon systems and essential direct support systems from enemy hostile operations and other forms of ground

attack.

Security Relevant Event Any event that attempts to change the security state of the system. Also, any event that

attempts to violate the security policy of the system.

Security System The aggregate of all mechanical and electronic equipment countermeasures in a system

which contributes to its security from intelligence gathering and clandestine or overt attack, including organized system function and procedures, as well as the security

subsystem.

Security Testing A process used to determine that the security features of a system are implemented as

designed and that they are adequate for a proposed application environment.

SED Software Engineering Division.

SEDD Systems Engineering Development Data Base.

SEDS System Engineering Detailed Schedule

SEE Software Engineering Environment.

SEED Support for East European Democracy (P.L.101-179; 22 USC 5421).

SEER 1. Sensor Equipment Evaluation and Review.

2. Sensor Experimental Evaluation Review.

SEFC See Space Environment Forecast Center.

Segment A grouping of elements that are closely related and often physically interface. It

consists of CIs produced by several contractors and integrated by one.

SEI Software Engineering Institute.

SEIC Systems Engineering and Integration Contractor.

SEIC PP Systems Engineering Integration Contractor Program Plan.

SEIPT Systems Engineering Integrated Product Team.

SEIT Systems Engineering Integration and Test.

Selected Acquisition Reports (SAR) Standard, comprehensive, summary status reports on major defense acquisition programs

(ACAT I) required for periodic submission to Congress.

Selective Kill Assigns interceptors to targets on the basis of missile type, launch area, impact area,

time of launch/arrival or predicted threat utility (e.g., SS-18 or its follow-on).

Selective, Adaptive Defense Selective, adaptive defense assigns interceptors to RVs based upon defended asset values, the number of arriving RVs and time to impact.

values, the number of univing it is und time to impact.

Selectivity Refers to choosing a subset of targets either for attack or defense. (See Preferential

Defense and Preferential Offense.)

SEMA Special Electronics Mission Aircraft.

Semi-Active Sensor One that does not generate radiation itself, but that detects radiation reflected by targets when they are illuminated by other BMD components. Such devices are used for tracking and identification and can operate without revealing their own locations.

Semi-Active Homing Guidance A system of homing guidance wherein the receiver in a missile utilizes radiations from a target which has been illuminated by an outside source.

SEMP See Systems Engineering Management Plan.

SEMS System Engineering Management Schedule.

Senior Procureme

Procurement Executive (SPE)

The senior official responsible for management direction of the Service procurement system, including implementation of unique procurement policies, regulations, and standards. The Senior Procurement Executive for all non-Service DoD Components is the Under Secretary of Defense for Acquisition and Technology, who has delegated many of these functions to the Heads of Defense Agencies including the Director,

BMDO.

SENSCOM Sentinel System Command.

Sensor Data Measurement information. For a passive sensor it is usually irradiance time, and LOS.

For an active sensor it may include range, doppler, cross section, etc., as well.

Sentinel ABM system designed for light area defense against a low level ballistic missile attack

on the United States. Developed into the Safeguard system in late 1960's.

SEO Survivability Enhancement Option.

SEP 1. Signal Entrance Panel. 2. Societé Europeené de Propulsion.

3. Software Engineering Process. 4. System Evaluation Plan.

Separation Hardware Objects expelled during payload separation sequence.

SEPG Software Engineering Process Group.

SEPRD System Element Production Readiness Demonstration.

SEQ Sequence, or Staff Equivalent.

Sequestration The reduction or cancellation of new budget authority; unobligated balances, new loan

guarantee commitments or limitations; new direct loan obligations, commitments, or limitations; spending authority; and obligation limitations. As delineated in the Budget Enforcement Act of 1990, sequestration is necessary if legislation is enacted that would

cause spending in any appropriations category to exceed a specified cap.

SERB Software Engineering Review Board.

SERD Support Equipment Recommendation Data (ILS term).

SERG System Engineering Review Group.

Service See definition of DoD Component Acquisition Executive.

Acquisition Executive (SAE)

Service BMD Program

Executive Officer

(PEO)

A senior official responsible for execution of Service PMAs and for providing guidance and Service-related direction to subordinate Program Managers. The PEO will also serve as a deputy to the GM. (Consistent with PEO authorities and responsibilities

documented in DoDD 5000.1 and DoDI 5000.2.)

Service Component Command A command consisting of the Service component commander and all those individuals, units, detachments, organizations and installations under the command that have been

assigned to the unified command.

Service Life Extension

Program (SLEP)

Modification(s) to fielded systems undertaken to extend the life of the system beyond

what was previously planned.

Service Test A test of an item, system, or technique conducted under simulated or actual operational

conditions to determine whether the specific military requirements or characteristics are

satisfied.

SES Seeker Experimental System.

SESE Software Engineering Support Environment.

SET System Evaluation Threat.

SETA 1. Scientific (System) Engineering, and Technical Assistance.

SETAC Systems Engineering and Technical Assistance Contractor.

SETP Solar Electric Aircraft Test Platform.

SEW Space Electronics Warfare.

SEWC Space and Electronic Warfare Coordinator.

SEWS 1. Satellite Early Warning System. 2. Space-Based EWS.

SF Standard Form.

SFC See Space Forecast Center.

SFS Shoot-Fail-Shoot.

SG 1. Steering Group. 2. Silicon Graphics.

SGEMP System/Source Generated Electromagnetic Pulse.

SGLS Space/Ground Link Subsystem.

SGML Standard Generalized Markup Language (Computer term).

SHAPE Supreme Headquarters Allied Powers Europe.

SHF Super High Frequency.

SHIELD 1. System High Energy Laser Demonstration.

2. Silicon Hybrid Extrinsic Long-Wavelength Detection.

Shielding Any material or obstruction which absorbs (or attenuates) radiation and thus tends to

protect personnel or materials from the effects of a nuclear explosion. A moderately thick layer of any opaque material will provide satisfactory shielding from thermal radiation, but a considerable thickness of material of high density may be needed for nuclear radiation shielding. Electrically continuous housing for a facility, area, or

component, attenuates impinging electric and magnetic fields.

SHIPALT Ship Alteration.

Shoot-Back The technique of defending a space asset by shooting at an attacker.

Shoot-Look-Shoot

(SLS)

A tactic used to achieve Defense Engagement Options (DEOs), such as assured kill by shooting at the target, looking to see if it was killed, and shooting again, if necessary, to

achieve the kill.

SHORAD Short-Range Air Defense.

Short Range Ballistic Missile (SRBM) A ballistic missile with a range capability of 30 km to 1,000 km. (USSPACECOM)

Short Wavelength Infrared (SWIR)

Thermal radiation emitted by a source in the electromagnetic spectrum encompassing

infrared wavelengths of 0.75 to 3 microns.

SHOTL Simulated Hot Launch (missile engineering term).

shp Shaft Horsepower.

Shrouded RVs Reentry vehicles enclosed in a material designed to shield its thermal and other

characteristics.

SI Special Intelligence.

SI&I Systems Integration and Interoperability.

SiC Silicon Carbide.

SIC Standard Industrial Classification.

SICPS Standard Integrated Command Post Shelter.

SIDAC Single Integrated Damage Assessment Capability.

SIDD System Interface Description Document (USA term).

Sidelobes Residual EMR surrounding the main beam, which is of weaker power than the main

beam.

SIDPERS Standard Installation Division Personnel System (USA term).

SIDS Secondary Imagery Dissemination System.

SIE SATKA Integrated Experiment.

SIF 1. System Integration Facility; 2. Selective Identification Feature.

3. Security Issues Forum.

SIGINT Signal Intelligence.

Signal-to-Noise Ratio (S/N) (SNR)

Relative power of the signal to the noise in a channel; usually measured in decibels.

Signals Security (SIGSEC)

The overall program for communication and electronic security.

Signature

1. Distinctive type of radiation emitted or reflected by a target, which can be used to

identify that target; 2. The characteristic pattern of a target displayed by detection and

identification equipment.

Signature Histories A list of observed target signature characteristic parameter values as a function of

missile flight time used for target discrimination and kill assessment.

SIGSEC See Signals Security.

SIIPT System Integration Integrated Product Team (THAAD Program term).

SIL Systems Integration Laboratory; Lockheed Martin Missiles and Space Company,

Sunnyvale, CA.

SIM Simulation.

SIMM Second In-line Memory Module.

Simple Security Condition

A Bell-LaPadula security model rule allowing a subject read access to an object only if

the security level of the subject dominates the security level of the object.

SIMS Security Information Management System.

Simulation A simulation is a method for implementing a model. It is the process of conducting

experiments with a model for the purpose of understanding the behavior of the system modeled under selected conditions or of evaluating various strategies for the operation of the system within the limits imposed by developmental or operational criteria. Simulation may include the use of analog or digital devices, laboratory models, or "testbed" sites. Simulations are usually programmed for solution on a computer; however, in the broadest sense, military exercises and wargames are also simulations.

Simulator A generic term used to describe a family of equipment used to represent threat weapon

systems in development testing, operational testing, and training. A threat simulator has one or more characteristics which, when detected by human senses or man-made sensors, provide the appearance of an actual threat weapon system with a prescribed

degree of fidelity.

SINCGARS Single-Channel Ground and Airborne Radio System.

Single Integrated Operational Plan (SIOP) Plan by which the nuclear strategic offensive forces will retaliate when directed by the

NCA.

Single-Level Device A device that is used to process data of a single security level at any one time. Since the device need not be trusted to separate data of different security levels, sensitivity

labels do not have to be stored with the data being processed.

Singlet A space vehicle, such as a Brilliant Pebble, which contains only one intercept vehicle.

SIOP See Single Integrated Operational Plan.

SIP SINCGARS Improvement Program (USA term).

SIPM Service Integration Program Manager.

SIPRI Stockholm International Peace Research Institute (Sweden).

SIPRNET 1. Secret Internet Protocol Router Network. 2. Secure Information Protocol Net.

SIPT 1. System Integrated Product Team. 2. Services Integrated Product Team.

SIR Signal Interference Ratio.

SIRE Space Infrared Experiment.

SIRMR Senior Information Resources Management Representative.

SIRRM Standardized Infrared Radiation Model.

SIRST System Shipboard InfraRed Search and Track System (USN term).

SIS Special Compartmented Information Isolation Segment.

SISS Subcommittee on Information Systems Security.

SIT System Integration Test.

SITREP Situation Report.

The determination of the extent to which observed event(s) constitute a threat (e.g., Situation

Assessment isolated event, mass attack, etc.), using the attack characterization information.

SIWS School of Information Warfare and Strategy.

Six Year Defense The official DoD document which summarizes forces and resources associated with Program (SYDP) programs approved by SECDEF. Its three parts are the organizations affected,

appropriations accounts (RDT&E, operations & maintenance, etc.), and the 10 major force programs (strategic forces, airlift/sealift, R&D, etc.). R&D is Program 6. Under the annual PPBS cycle, SYDP is published normally three times: October, January and May. The primary data element in SYDP representing aggregation of organizational

entities and related resources is the program element.

Size of Threat (LxWxAltitude) A volume of space in which a particular group of RVs would occupy, Corridor

defined by launch location and designated target area.

SKKP (Former) Soviet system of outer space monitoring.

Skunkworks A separate program management operation established to operate outside the normal

process, either to expedite development or because of high security classification.

SLSea Level.

SLAM Stand-off Land Attack Missile.

SLAM-ER Standoff Land Attack Missile-Expanded Response (USN term).

SLAR Side Looking Airborne Radar.

SLAT Supersonic Low Altitude Target [missile].

Slave A remote system or terminal whose functions are controlled by a central "master"

> system. It is similar in concept to a host system in that it responds to remotely generated requests, but unlike a host system, is usually capable of performing a limited

range of operations.

SLBD Sea Lite Beam Director.

SLBM See Submarine-Launched Ballistic Missile.

SLC Space Launch Complex.

SLCM Sea-Launched Cruise Missile.

SLD System Link Designator.

Slew Time The time needed for a weapon/sensor/antenna to move from point to point.

SLIP Serial Line Internet Protocol. **SLKT** Survivability, Lethality, and Key Technology.

SLOC 1. Sea Line of Communication.

2. Source Lines of Code (TelComm/Computer term).

SLRX System Life-cycle Risk Expert.

SLS See Shoot-Look-Shoot.

SLT Strategic Laser Technology.

SLV 1. Space Launched Vehicle. 2. Satellite Launch Vehicle.

SM 1. Skunkworks Mission. 2. System Manager.

SM&R Source, Maintenance and Recoverability (ILS term).

SM-2 Standard Missile-2. (U.S. Navy)

SM-3 Standard Missile-3.

SM-ALC Sacramento Air Logistics Center (USAF term).

Small Optics Precision mirrors or refractors, less than 1 meter, and related technology, for precise

pointing and tracking from/to relatively small vehicles separated by large distances.

Smart checklist "destroy, disrupt, damage or destroy" BMC3 tool for BMD warfighters.

Smart Munitions Munitions that "think for themselves" and have the self-contained ability to search,

detect, acquire and engage targets.

SMAT Satellite and Missile Analysis Tool.

SMATH Space Materials Advanced Technology for Hardness.

SMC 1. Space and Missile System Center, Los Angeles AFB, CA.

2. Simulation Maintenance Contractor.

SMCo Standard Missile Company.

SMCS Standard Monitoring and Control System [for US naval ships] (see ICS).

SMD Strategic Missile Defense.

SME 1. Single Management Element. 2. Subject Matter Expert.

SMERFS Statistical Modeling and Estimation of Reliability Functions for Software.

SMES Super Conducting Magnetic Energy Storage.

SMMW Submillimeter Wave.

SMP Soviet Military Power (US DoD publication).

SMR Code Source, Maintenance, and Recoverability Code (ILS term).

SMS See Standard Mobile Segment.

SMTP Simple Mail Transfer Protocol (Computer term).

SMTS OBSOLETE. See Space and Missile Tracking System (formerly called Brilliant Eyes).

Replaced by SBIRS.

SNC System Network Controller.

SNDM Secretary of the Navy Decision Memorandum.

SNDV Strategic Nuclear Delivery Vehicle.

SNF 1. Strategic Nuclear Forces. 2. Short-range Nuclear Forces.

SNI San Nicholas Island. Part of the PMTC.

SNIE Special National Intelligence Estimate (US).

SNIPE OBSOLETE. SDI System Network Processor Engine.

SNL Sandia National Laboratory, Albuquerque, NM.

SNR See Signal-to-Noise Ratio (Also called S/N).

SNRC Soreq [Israeli] Nuclear Research Center.

SOA 1. State-of-the-Art. 2. Speed of Advance.

SOC Statement of Capability (Contracting term).

SOCOM Special Operations Command.

SOCS Subcommittee on Computer Security.

SODD System and Operations Document.

SODO Senior Operations Duty Officer (JFACC term).

SODSIM Strategic Offense/ Defense Simulator.

SOF 1. See Strategic Offense Forces. 2. Special Operations Forces.

SOFA Status of Forces Agreement.

Software Architecture The implementation of solutions to the problems in the domain. It becomes a model for constructing applications and mapping requirements from the domain model to reusable components. A generic architecture provides a high-level generic design for a family of related applications as well as a set of components intended for any instance of that application. The generic design eliminates the need to develop a high-level design for each application within the domain. As a result, domain developers use these representations as specifications for reusable components.

Software Development Cycle

1. The period of time that begins with the decision to develop a software product and ends when the product is delivered. This cycle typically includes a requirements phase, design phase, implementation phase, test phase, and sometimes, installation and checkout phase. Contrast with software life cycle. 2. The period of time that begins with the decision to develop a software product and ends when the product is no longer being enhanced by the developer. 3. Sometimes used as a synonym for software life cycle.

Software Documentation

Technical data or information, including computer listings and printouts, in human-readable form, that describe or specify the design or details, explain the capabilities, or provide operating instructions for using the software to obtain desired results from a software system. (See Documentation.)

Software Engineering

1. A discipline whose objectives are to define, create, and apply a well-defined methodology that addresses a software life cycle of planning, development, and maintenance. 2. The application of a systematic, disciplined, quantifiable approach to the development, operation, and maintenance of software, that is, the application of engineering to software.

Software Life Cycle

The period of time that begins when a software product is conceived and ends when the software is no longer available for use. The software life cycle typically includes a concept phase, requirements phase, design phase, implementation phase, test phase, operation and maintenance phase, and, sometimes, retirement phase.

Software Support

The sum of all activities that take place to ensure that implemented and fielded software continues to fully support the operational mission of the system. Software support includes pre-deployment software support and post-deployment software support.

Software Test Environment

A set of automated tools, firmware devices, and hardware necessary to test software. The automated tools may include but are not limited to test tools such as simulation software, code analyzers, test case generators, path analyzers, etc. and may also include those tools used in the software engineering environment.

SOI

- 1. Silicon-on-Insulator. 2. See Space Object Identification.
- 3. Statement of Intent. 4. Signal Operation Instructions (See also CEOI).

SOIF See System Operation and Integration Functions.

SOJ Stand-Off Jammer.

Soldier-Machine Interface

Considerations through system analysis and psychophysiology of equipment designs and operational concepts, to ensure they are compatible with capabilities and limitations of operators and maintainers.

Sole Source Acquisition

A contract for the purchase of supplies or services that is entered into a proposal to be entered into by an agency after soliciting and negotiating only one source.

SOM System Object Model.

SONET Synchronous Optical Network.

SOO Statement of Objectives (See also SOW).

SOP See Standard Operating Procedure.

SORTIELOT Sortie Allotment message (JFACC term).

SORTS Status of Resources and Training System.

SOS Silicon-on-Sapphire.

SOSUS Sound Surveillance System (USN term).

Source Selection Authority The official designated to direct the source selection process, approve the selection plan, select the source(s), and announce contract award.

Source Selection Evaluation Board A group of military and/or government civilian personnel, representing functional and technical disciplines. It is charged with evaluating proposals and developing summary facts and findings during source selection.

Source Selection Plan (SSP)

A formal written document which sets forth the source selection organization and management chain for a specific acquisition. It provides a guide for evaluators on how to conduct the evaluation, it details the criteria to be used to evaluate the offers received in a competition procurement, and it establishes a basis upon which to distinguish between proposals and to make an award. The SSP is written by the Program Office and approved by the SSA.

SOW See Statement of Work.

SP 1. Security Personnel. 2. self-propelled. 3. Signal Processing.

SP-100 Space Power-100 kW.

SP/CR Software Problem/Change Request.

SPACC See Space Command Center.

Space and Missile Tracking System (SMTS) OBSOLETE. Space-based satellite sensors for surveillance, tracking, and discrimination of enemy objects during post-boost and midcourse phases. These sensors support ground-based interceptors for both theater and national defense.

Space Based Infrared System (SBIRS) SBIRS will be a consolidated system that will meet United States infrared space surveillance needs through the next 2-3 decades. SBIRS is intended to be an integrated "system of systems" including multiple space constellations and an evolving ground element. The baseline SBIRS architecture consists of four Geosynchronous Earth Orbit (GEO) satellites; two sensors on Highly Elliptical Orbit (HEO) satellites; Low Earth Orbit (LEO) satellites; a ground system consisting of a CONUS-based Mission Control Station (MCS), a backup MCS, a survivable MCS, and oversees relay ground stations and relocatable terminals; and associated communications links. The SBIRS is designed to meet the missile defense, missile warning, technical intelligence, and battlespace characterization mission requirements identified in the JROC-validated SBIRS Operational Requirements Document. The SBIRS program will begin replacing the operational Defense Support Program (DSP) ground segment in 1999 and begin replacing the DSP satellites in 2002.

Space Command Center (SPACC) A USSPACECOM center located on Peterson AFB, CO, in Building 147(1). It is the primary command facility for USSPACECOM providing USCINCSPACE with the information necessary to perform assigned missions.

Space Control Operations

Operations that provide freedom of action in space for friendly forces while, when directed, denying it to an enemy; includes the broad aspects of protection to US and Allied space systems and negation of enemy space systems. Space control operations encompass all elements of the space defense mission.

Space Defense

The defensive aspect of space control operations which includes all active or passive measures planned or taken to defeat attacks against friendly space systems or enemy attacks from space.

Space Defense Operations Center (SPADOC)

A center in CMAFB responsible for monitoring and reporting of ASAT attacks on Blue satellites, negating designated satellites, and reconstituting and protecting designated satellites.

Space Detection and Tracking System (SPADATS)

A network of space surveillance sensors operated by the U.S. Air Force.

Space Environment Forecast Center (SEFC)

Center at Peterson AFB, CO that supplies terrestrial and solar weather to the CMAFB Weather Support Unit (WSU) and designated USSPACECOM units.

Space Forecast Center (SFC)

Center at Falcon AFB, CO that supplies solar and space environmental warnings, analyses, and forecasts to USSPACECOM, NORAD, and DoD customers.

Space Mines

Devices that can track and follow a target in orbit, with the capability of exploding on command or by pre-program to destroy the target.

Space Object Identification (SOI)

Use of radar, imaging, and other collection resources to determine size, shape, ephemeris, and identity of space objects.

Space Power

Generation and control of electrical energy in space, from various originating sources (e.g., nuclear, chemical, solar).

Space Support Operations

Operations required to ensure that space control and support of terrestrial forces are maintained. They include activities such as launching and deploying space vehicles, maintaining and sustaining space vehicles while on orbit, and recovering space vehicles if required.

Space Surveillance (SPASUR)

An operational space surveillance system with the mission to detect and determine the orbital elements of all man-made objects in orbit of the earth. The mission is accomplished by means of a continuous fan of continuous wave energy beamed vertically across the continental United States, and an associated computational facility. It is the Navy portion of the North American Aerospace Defense Command Space Detection and Tracking System.

Space Surveillance Center (SSC) Space Transportation

A center in CMAFB responsible for maintaining the satellite catalog, laser clearinghouse, collision and RFI avoidance, and Tracking and Impact Prediction (TIP).

Transportation System (STS) A national asset that provides routine access to space for both civil and defense users. Elements of the STS include the Space Shuttle, upper stages, Spacelab, launch and landing facilities, simulation and training facilities, and mission control facilities. The STS is a reusable system capable of deploying a wide variety of scientific and applications satellites. It can carry payloads weighing up to 65,000 pounds.

Space-Based Architecture Study (SBAS)

A 1989 study to review the space-based elements of the Phase I SDS architecture, with emphasis on Space-Based Interceptor (SBI), Brilliant Pebbles (BP), and the Space Surveillance and Tracking System (SSTS), to define and justify a recommended architecture for Phase I and beyond.

Space-Based Interceptor (SBI) OBSOLETE. A distributed set of low earth orbit satellites that may provide launch detection and booster tracking, and that serve as kinetic or kinetic energy interceptors of boosters, PBVs, and/or RVs. (USSPACECOM)

Space-Based Sensor A system that provides global above-the-horizon surveillance to detect and track PBVs, object clusters (RVs and penaids), and resolved midcourse objects, as well as below-the-horizon tasked hot spot detection of boost phase missiles when cued by a space-based weapon or *a priori* knowledge. It provides surveillance data for use in situation assessment, operational intelligence collection, and for cueing other sensor and weapon elements. During midcourse, sensors discriminate and track RVs and associated objects to support midcourse engagements. (USSPACECOM)

Space-Based Surveillance and Tracking System (SSTS) OBSOLETE. A satellite-borne electro-optic tracking and surveillance system in medium earth orbit. The satellites would track targets from medium earth orbits against a cold space background and near the earth limb. Individual objects' state vectors would be generated from correlated information from two or more sensors. (Predecessor to Brilliant Eyes (BE).)

Spacetrack

USSPACECOM global system of radar, optical, and radiometric sensors linked to a computation and analysis center in the Space Surveillance Center. The Spacetrack mission is detection, tracking, and cataloging of all man-made objects in orbit about the earth.

SPADATS

See Space Detection and Tracking System.
 Space Defense Acquisition and Tracking System.

SPADCCS

Space Defense Command and Control System.

SPADOC

See Space Defense Operations Center. (U.S. antisatellite mission control).

SPADTS

Space Detection and Tracking System.

SPAR

System Performance Analysis Report.

SPARTA

SPARTA, Inc., Laguna Hills, CA.

Spartan

Nuclear-armed, long range mid-course interceptor used in SAFEGUARD/Sentinel systems.

SPAS

Space Power Architecture Study.

SPASUR

See Space Surveillance.

SPAWAR

- 1. Naval Space and Warfare Commend.
- 2. Space and Naval Warfare Systems Command (US).

SPC

- 1. Statistical Process Control 2. Special Program Center.
- 3. See Special Programs Center.

SPE

See Senior Procurement Executive.

SPEAR

Space Power Experiments Aboard Rocket.

SPEC

Specification.

Special Data Commands

Special, non-routine commands distributed for surveillance battle management, and fire

control.

Special Programs

Center

National center for threat modeling and production. Located in the National Test

Facility at Falcon AFB, CO.

Special Test Equipment (STE) Single or multipurpose integrated test units engineered, designed, fabricated, or modified to accomplish special purpose testing. Such testing units comprise electronic, hydraulic, pneumatic, mechanical, or other items interconnected so as to become a new function entity, causing the individual item or items to become interdependent and essential in the performance of special purpose testing in the development or production

of particular supplies or services.

Specification A document (or other media) that specifies, in a complete, precise, verifiable manner,

the requirements, design, behavior, or other characteristics of a system or component, and often, the procedures for determining whether or not these provisions have been

satisfied.

Specification Language

A language, often a machine-processable combination of natural and formal language, used to specify the requirements, design, behavior, or other characteristics of a system

or system component.

Specified Command

A command that has a broad continuing mission and that is established and so designated by the President through the Secretary of Defense with the advice and

assistance of the Joint Chiefs of Staff.

Speckled Trout C-135C airplane with ACBA equipment.

SPEED System Planning, Engineering, and Evaluation Device.

SPF Standardized Plume Flowfield.

SPFE Special Projects Flight Experiments.

SPICE Space Integrated Controls Experiment.

SPIMS Strategic Program Information Management System (SDIO/BMDO term).

SPINE Shared Program Information Network.

SPINS Special Instructions (JFACC term).

SPIRE Space Performance in Radiation Environments.

SPIRIT Space Infrared Imaging Telescope.

SPM Software Programmer's Manual.

SPO 1. See System Program Office. (Air Force). 2. Special Project Office.

SPOCK Security Proof of Concept Keystone.

SPOD Seaport of Debarkation.

SPOE Seaport of Embarkation.

Spoofing Any technique by which sensitive information or commands may be substituted or

stopped without the knowledge of the authorized personnel involved.

SPOT Systeme Probatoire d'Observation de la Terre - French observation satellite

SPP 1. System Performance Parameters. 2. Standard Practice and Procedure.

2. SPRM Performance Prediction.

SPR 1. Secretarial Program Review (AF). 2. Summer Program Review (BMDO term).

3. Secretarial Performance Review (OSD). 4. Sponsor's Program Review.

Sprint Nuclear-armed, short range interceptor used in SAFEGUARD/Sentinel systems.

SPRM Solid Propellant Rocket Motor.

SPRN (Former) Soviet system for missile attack warning.

SPS 1. Software Product Specification.

SPT Support.

SPY-1 AEGIS radar.

SQA Software Quality Assurance.

SQL Structured Query Language (Computer term).

sqrt square root.

SR AFSPC Regulation.

SRA See System Requirements Analysis.

SRAM 1. Short-Range Attack Missile.

2. Static Random Access Memory (Computer term).

SRB Solid Rocket Booster.

SRBM See Short Range Ballistic Missile.

SRD Systems Requirement Document.

SREMP Source Region Electromagnetic Pulse.

SRF Strategic Rocket Forces.

SRHIT OBSOLETE. Small Radar Homing Intercept Technology. Predecessor program to

Flexible Lightweight Agile Guided Experiment (FLAGE).

SRIM Short-Range Intercept Missile.

SRINF Short Range Intermediate Nuclear Force.

SRL 1. Site Readiness Level. 2. System Readiness Level.

3. See Superradiant Laser.

SRM 1. Small Rocket Motor. 2. Sensor Response Model.

SRMP Sounding Rocket Measurement Program.

SRMSC Stanley R. Mickelsen SAFEGUARD Complex site.

SRMU Solid Rocket Motor Upgrade.

SRO System Readiness Objective.

SRR See System Requirements Review.

SRS 1. Site/System Requirements Study. 2. Software Requirements Specification.

3. Satellite Remote Sensing.

SRT Strategic Red Team.

SRTBM Short range theater ballistic missile.

SRU Shop Replaceable Unit.

SRV Single Reentry Vehicle.

SS 1. Solid State (USASSDC Family of T-GBR term). 2. Simulator System.

SS- Surface-to-Surface.

SS-18 Largest ICBM in former Soviet inventory credited with carrying 10 RVs, but capable of

holding many more.

SS96 Summer Study 1996 [Director, BMDO].

SSA 1. See Source Selection Authority. 2. Software Support Activity (ILS term).

SSAC Source Selection Authority Council/Committee (Acquisition term).

SSB Single Side Band.

SSBN Ballistic Missile Submarine (nuclear).

SSC 1. See Space Surveillance Center. 2. Scan-to-Scan Correlation.

3. Strategic Systems Committee. 4. Skill Specialty Code (USAF ILS term).

5. Source Selection Chairman (Acquisition term).6. Standard Systems Center, Gunter AFB, AL.

7. Surface-to-Surface [Ground-launched] Cruise [missile].

8. Simulation Support Center.

SSCM Surface-to-Surface Cruise Missile.

SSD 1.OBSOLETE. Space Systems Division. (Now USAF/SMC.).

2. Simulation Summary Document.

SSDA Solid State Demonstration Array.

SSDC Space and Strategic Defense Command (US Army).

SSDD System/Segment Design Document.

SSDR Subsystem Design Review.

SSE 1. See System Security Engineering. 2. Space Surveillance Experiment.

3. System Simulator Environment.

SSEB Source Selection Evaluation Board.

SSEKP Single Shot Engagement Kill Probability.

SSGM 1. Strategic Scene Generation Model. 2. Synthetic Scene Generation Model.

SSI 1. Sensor Segment Interface. 2. Sensor System Interface.

SSIMU Solid State Inertial Measurement Unit.

SSKEP Single Shot Kill Estimated Probability.

SSKP Single Shot Kill Probability.

SSL Solid State Laser.

SSM Surface-to-Surface Missile.

SSM/I Special Sensor Microwave Imagery (Weather Satellite term).

SSM/T2 Special Sensor Meteorology Temperature and Vapor(Weather Satellite term).

SSM/TI Special Sensor Meteorology Temperature (Weather Satellite term).

SSMP See System Security Management Plan.

SSMS See Standard Survivable Message Set.

SSMTR Sary Shagan Missile Test Range.

SSN 1. Space Surveillance Network.

2. Submarine, Nuclear-powered (Navy Ship Designation term).

SSO Special Security Office.

SSOD Special Session On Disarmament.

SSP 1. See Source Selection Plan. 2. System Support Package.

SSPAR Solid State Phased Array Radar.

SSPK Single Shot Probability of Kill.

SSPM 1. Solid State Photo Multiplier. 2. Software Standards and Procedures Manual.

SSPO Strategic Systems Program Office. (U.S. Navy)

SSR 1. Software Specification Review. 2. System Specification Review.

3. Specific System Representations.

SSRMP Space Sounding Rocket Measurement Program.

SSRT Single Stage Rocket Technology.

SSS 1. Space Sensor System. 2. System/Segment Specification.

SSSG Space System Support Group.

SST System Specific Threats.

SSTB System Simulation Test Bed.

SSTS OBSOLETE. See Space-Based Surveillance and Tracking System.

SSUP System Supplement.

SSWG System Safety Working Group.

ST 1. Simulation Tool. 2. Standby Time (ILS term). 3. Strategic Threat.

ST/STE Special Tooling/Special Test Equipment.

STA 1. Significant Technical Accomplishments. 2. System Threat Report.

3. Space Transportation Association. 4. System Threat Assessment.

5. Strategic Threat Assessment.

Stage An element of the missile or propulsion system that generally separates from the missile

at burnout or cut-off. Stages are numbered chronologically in order of burning.

STAGE Simulation Toolkit and Generation Environment.

STANAG Standardization Agreement (NATO).

Standard Missile A shipboard, surface-to-surface/air missile.

Standard Mobile Segment (SMS) SMS is to be the standard for all future ground mobile, air transportable command

centers.

Standard Survivable Message Set (SSMS) Message set which contains the standard format used by ITW/AA data sources.

Standardization

The process by which DoD achieves: (1) the closest practicable cooperation among forces; (2) the most efficient use of research, development, and production resources; and (3) agreement to adopt on the broadest possible basis the use of: (a) common or compatible operational, administrative, and logistics procedures and criteria; (b) common or compatible technical procedures and criteria; (c) common, compatible, or interchangeable supplies, components, weapons, or equipment; and (d) common or compatible tactical doctrine with corresponding organizational compatibility.

STAR Stategic Threat Assessment Report.

STARS 1. Strategic Target System. 2. Strategic Tactical Airborne Range System.

3. Surveillance and Target Attack Radar System.

START Strategic Arms Reduction Treaty.

STASS Space Transportation Architecture System Study.

Statement of Work (SOW)

That portion of a contract that establishes and defines all nonspecification requirements

for contractors efforts either directly or with the use of specific cited documents.

Static Analysis The process of evaluating a program without executing the program. See also desk

checking, code audit, inspection, static analyzer, walk-through. Contrast with dynamic

analysis.

STB 1. Surveillance Test Bed. 2. System Test Bed.

STC 1. SHAPE Technical Center. 2. Systems Test Control.

3. Space Tactics Course.

STD 1. System Technology Demonstration. 2. Software Test Description.

STDN Secure Tactical Data Network.

STE See Special Test Equipment.

Stealth 1. A technique used to frustrate discrimination that uses the decoy shape and material

content to reduce the reflected IR, radar, optical or acoustic cross-section to the

defensive sensor.

2. US Advanced Technology Bomber under development.

Stellar Guidance A system wherein a guided missile may follow a predetermined course with reference

primarily to the relative position of the missile and certain preselected celestial bodies.

STEP 1. Surveillance and Tracking Experiment Program.

2. Space Test Experiment Platform.

Steradian The unit of measure of solid angles equal to the angle subtended at the center of a

sphere of unit radius by unit area on its surface.

Stereo Using two or more sensors.

STF Static test facility.

STILAS Scientific and Technical Information Library Automation System (USASSDC term)

Stimulated

Physical process by which an excited molecule is induced by incident radiation to emit **Emission** radiation at an identical frequency and in phase with the incident radiation. Lasers

operate by stimulated emission.

STINFO Science and Technical Information.

STINFO Center Science and Technical Information data centers archiving and providing user access and

support to a variety of missile defense test and evaluation data.

STM 1. Significant Technical Milestone. 2. Space Tactics Model.

STO 1. Special Technical Operations (JFACC term).

2. Science and Technology Objective.

STOAL Short Takeoff/ Arrested Landing.

STOM System Test Object Model. Storage, Handling,

and

Transportation Environments

These environment categories cover the applicable free field or ambient environments which the system assets must be capable of withstanding during storage, handling and transportation. They include the full array of applicable atmospheric and ground environments to which BMD assets will be exposed during these non-operational aspects of system deployment such as pressure, shock and vibration environments, among others.

Storm

Name of a theater ballistic missile test target system, part of the Baseline Target Set.

Storm Shadow

Conventionally Armed Stand Off Missile weapon based on Matra of France's Apache missile.

STOW

Synthetic Theater of War (Army term).

STP

1. System Test Plan 2. Sensor Tasking Plan. 3. Software Test Plan.

STR

Software Test Report.

STRAP

HATMD System Training Plan.

STRATCOM

Strategic Command, Offutt AFB, NE..

Strategic Defense

All active and passive measures to detect, identify, assess, degrade and defeat ballistic missile, air, and space threats to North America, including measures to nullify or reduce the effectiveness of such attacks.

Strategic Defense Emergency

Declaration that attack is imminent or taking place.

Strategic Defense System (SDS) A generic descriptor which refers to all architectural elements of the evolving ballistic missile defense system.

Strategic Level of War

The level of war at which a nation or group of nations determines national or alliance security objectives and develops and uses national resources to accomplish those objectives.

Strategic Offensive Forces (SOF)

Those forces under the command of the Commander in Chief, USSTRATCOM, the Commander in Chief, Atlantic Command, the Commander in Chief, Pacific Command, and other forces assigned to execute the Single Integrated Operations Plan (SIOP). These forces include but are not limited to B-52s, B-1s, FB-111s, Minuteman IIs and IIIs, Peacekeepers, Poseidons, and Tridents.

Strategic Reserve

That quantity of material that is placed in a particular geographic location due to strategic considerations or in anticipation of major interruptions in the supply distribution system. It is over and above the stockage objective.

Strategic Warning

A warning prior to the initiation of a threatening act.

Strategic Warning Lead Time That time between the receipt of strategic warning and the beginning of hostilities. This time may include two action periods: strategic warning pre-decision time and strategic warning post-decision time.

Strategic Warning Post-Decision Time

That time which begins after the decision, made at the highest levels of government(s) in response to strategic warning, is ordered executed and ends with the start of hostilities or termination of the threat. It is that part of strategic warning lead time available for executing pre-hostility actions to strengthen the national strategic posture; however, some preparatory actions may be initiated in the pre-decision period.

Strategic Warning Pre-Decision Time

That time which begins upon receipt of strategic warning and ends when a decision is ordered executed. It is that part of strategic warning lead time available to the highest levels of government(s) to determine the strategic course of action to be executed.

Standard TRE Display.

STRICOM Simulation, Training, and Instrumentation Command (USA term).

Structured Attack

STREAD

An attack in which the arrival of warheads on their diverse targets is precisely timed for

maximum strategic impact.

Structured Design A disciplined approach to software design that adheres to a specified set of rules based

on principles such as top-down design, stepwise refinement, and data flow analysis.

Structured Program

A program constructed of a basic set of control structures, each one having one entry point and one exit. The set of control structures typically includes: sequence of two or more instructions, conditional selection of one of two or more instructions, conditional selection of one of two or more instructions, and repetition

of an instruction or a sequence of instructions.

STRV Space Technology Research Vehicle.

STS See Space Transportation System.

STSC Software Technology Support Center.

STT 1. Small Tactical Terminal (USAF term). 2. Stockpile-to-Target (USA term).

STTR Small Business Technology Transfer.

STU Secure Telephone Unit.

STW Strike Warfare.

STWC Strike Warfare Commander.

STWG Simulation Tools Working Group.

Subassembly Two or more parts joined together to form a unit, capable of disassembly, which is only

a part of a complete machine, structure, or other article.

Subcontractor A contractor who enters into a contract with a prime contractor.

Subject Security

Level

A subject's security level is equal to the security level of the objects to which it has both read and write access. A subject's security level must always be dominated by the

clearance of the user and with the associated subject.

Submarine-Launched Ballistic Missile (SLBM) A ballistic missile launched from a submarine, with a range of 3,000 to 6,000 miles.

SUBROC Submarine Rocket.

Subsystem A functional grouping of components that combine to perform a major function within an

element, such as attitude control and propulsion.

Subtractive Defense First come first engaged as long as weapons last.

SUCCESS Synthesized UHF Computer Controlled Equipment Subsystem.

Succession of Command

The planned or actual sequence in which subordinate commanders, in turn, become de facto commanders of a senior organization. Devolution of command is a synonymous

term.

SUM Software Users Manual (Computer term).

Sunk Costs The costs of resources already committed or spent. In comparing two alternatives, such

costs are "non-additive," and they are not germane to decisions about future use of

resources.

Sup Pro Supporting Programs (BMDO term).

Super Survivable Solar Power Subsystem Demonstrator.

Superradiance The process used by a superradiant laser to generate or amplify a laser beam in a single

pass through a lasant material, or, in the case of a free electron laser, through an electric or magnetic field in the presence of an electron beam. Superradiance is actually a form of stimulated emission. Also known as superfluorescence, or amplified

spontaneous emission.

Superradiant Laser (SRL) A laser in which the beam passes through the lasant only once; mirrors are not required for the operation of such a laser, as they are with more conventional lasers which are sometimes called "cavity lasers" to distinguish them from superradiant lasers. Free electron lasers may also be superradiant; the laser beam of a superradiant free electron laser would pass once through the electric or magnetic field (instead of a lasant) in the presence of an electron beam.

Supervisory Programs Computer programs that have the primary function of scheduling, allocating, and controlling system resources rather than processing data to produce results.

Supplemental Appropriation

An appropriation enacted as an addition to a regular annular appropriation act.

Support Equipment All system equipment required to support the ground and flight phases of the mission. Support equipment includes aerospace ground equipment (AGE), maintenance ground equipment (MGE), transportation and handling (T&H) equipment, and equipment used to support system deployment (i.e., assembly tools and fixtures, test and checkout equipment, personnel support and protection equipment).

Support Personnel

Individuals, in addition to operators, trainers, and maintainers, who are directly associated with an operational system(s), and who are critical to its continuous operation. Examples include program management offices, security, supply, administrative support, and the like.

Support Software

Software that aids in the development or maintenance of other software, for example compilers, loaders, and other utilities.

Suppression

Temporary or transient degradation of the performance of a weapons system, below the level needed to fulfill its mission objectives, by an opposing force.

SUPSHIP

Superintendant of Shipbuilding.

SURCOM Surveillance Constellation.

Surge Production An increased rate of production necessary to meet demands for defense items due to a

need for accelerated production to meet a threat or for a wartime or mobilization situation. This increased rate can be obtained by having excess production capacity

available or by utilizing multiple shifts of normal capacity measures.

Surveillance An observation procedure that includes tactical observations, strategic warning, and

meteorological assessments, by optical, infrared, radar, and radiometric sensors on

space-borne and terrestrial platforms.

Surveillance Requirements Requirements are requests for surveillance, including relative priorities for coverage and sensitivity levels, based on operational orders, selected response options and current

surveillance system availability.

Surveillance System Configuration The sensor types and locations and the modes of operation currently activated in the

surveillance system.

Surveillance, Satellite and Missile The systematic observation of aerospace for the purpose of detecting, tracking, and characterizing objects, events, and phenomena associated with satellites and inflight

missiles, friendly and enemy.

Survivability Operating Modes The operating modes not including but in addition to the self-defense modes that all the

elements can use to protect themselves against direct enemy attack.

Survivable and Enduring Command Center (SECC)

The USSTRATCOM mobile C^2 facility.

SUS Site Utilization Study.

Sustainer Propulsion stage of a missile usually operating after the booster cutoff.

SV Space Vehicle.

SVS 1. OBSOLETE. SSTS Validation Satellite. 2. Scientific Visualization Suite.

SW 1. Software or (S/W). 2. Space Wing.

SWC 1. Strike Warfare Commander. 2. Space Warfare Center.

Sweep Jamming A narrow band of jamming that is back and forth over a relatively wide operating band

of frequencies.

SWG Scenario Working Group.

SWIL Software-in-the-Loop.

SWIR See Short Wavelength Infrared.

SWSA Spatial Weapons System Analysis.

SWSC Space and Warning System Center.

SYDP See Six Year Defense Program.

Synchronization

For data streams, the process whereby a received set of data is placed in one to one correspondence with the data assumed to have been transmitted.

Synthesis

The automatic generation of a runnable system from a specialized design where each module description has associated implementations.

Synthetic Aperture Radar (SAR) A radar technique that processes echoes of signals emitted at different points along a satellite's orbit. The highest resolution achievable by such a system is theoretically equivalent to that of a single large antenna as wide as the distance between the most widely spaced points along the orbit that are used for transmitting positions. In practice, resolution will be limited by the radar receiver's signal processing capability or by the limited coherence of the radio signal emitted by the radar transmitter.

SYS System.

Sys C/O System Check Out.

Sys Cmn System Common.

Sys T&E System Test and Evaluation.

SYSCOM Systems Command.

System Any organized assembly of resources an procedures united and regulated by interaction

or interdependence to accomplish a set of specific instructions.

System Activation That set of coordination, assessment, decision, direction and control functions implemented to enable defense weapons, and to initiate the automated, real-time aspects of Battle Management, Engagement Control, and Weapon System Control.

System Architecture The structure and relationship among the components of a system. The system architecture may also include the system's interface with its operational environment. A framework or structure that portrays relationships among allthe elements of missile defense systems.

System Center (SC)

A center in CMAFB responsible for the scheduling of maintenance for worldwide sensors and supporting equipment as well as maintenance responsibility of equipment in CMAFB.

System Concept Paper (SCP) OBSOLETE. For a major program, was used to summarize the results of the concept exploration phase up to Milestone I and to describe the acquisition strategy, including the identification of the concepts to be carried into the demonstration and validation phase and the reasons for elimination of other concepts. Now an Integrated Program Summary (IPS).

System Configuration Control Board (SCCB) The senior SDS configuration control board. The SCCB will manage the system-level configuration of the SDS and the interfaces between elements of the SDS.

System Control

Function or task of monitoring the maintenance status of assigned sensors and computer systems.

System Deployment Delivery of the completed production system to the using activity.

System Design

1. The process of defining the hardware and software architectures, components, modules, interfaces, and data for a system to satisfy specified system requirements. 2. The result of the system design process.

System Design Concept

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 integral whole in meeting a mission need.

System Design Review (SDR)

Evaluates the optimization, correlation, completeness, and risks associated with the allocated technical requirements.

System Effectiveness

The measure of the extent to which a system may be expected to achieve a set of specific mission requirements. It is a function of availability, dependability, and capability.

System Families

A collection or grouping of interrelated software systems in the domain that share a set of common characteristics.

System Generated Electromagnetic Pulse (SGEMP)

Transient electromagnetic radiation caused by the photoelectron emission of the surface of an object subjected to a pulse of photon energy. Although local fields close to the object surface may reach quite high values (kilovolts), the primary disturbance mechanism is the flow of replacement current through the object in order to produce charge equalization.

System Integration Test

A live flight system-level test utilizing actual system command and control, sensors, and weapon hardware.

System Manager

A general term of reference to those organizations directed by individual managers, exercising authority over the planning, direction, and control, of tasks and associated functions essential for support of designated weapons or equipment systems.

System Operation and Integration Functions (SOIF)

The automated activities of tracking, communications, asset management, and battle plan execution which are executed under the guidance of the Command and Control Element. The allocation of these functions (and sub-functions) to the system elements will be specified in the architecture(s).

System Operational Concept

A formal document that describes the intended purpose, employment, deployment, and support of a system.

System Posture

A USSPACECOM system of graduated readiness steps to bring the strategic BMD system to fully generated alert, similar to the USSTRATCOM concept of posturing aircraft and missile forces to reduce reaction time.

System Program Office (SPO)

The office of the program manager and the point of contact with industry, government agencies, and other activities participating in the system acquisition process. (U.S. Army uses term "Project Office.")

System Readiness

System Readiness includes the development of OPLANs necessary to carry out the assigned mission, using strategy and guidance provided by higher authority along with knowledge of current system performance and planned capabilities. It includes peacetime tests and exercises to maintain the system in an operational state, and the demonstration and evaluation of alternate tactics and the verification of system performance, to the extent practicable. It provides for the continued training and exercise of personnel in operating the system under realistic conditions, and provides for control of other system test functions necessary to keep the system operating. It provides for detection of anomalies and for corrective action. It also provides for maintenance schedule control, historical maintenance data retention, maintenance training, and test results status reporting.

System Readiness Objective

A criterion for assessing the ability of a system to undertake and sustain a specified set of missions at planned peacetime and wartime utilization rates. System readiness measures take explicit account of the effects of reliability and maintainability system design, the characteristics and performance of the support system, and the quantity and location of support resources. Examples of system readiness measures are combat sortie rate over time, peacetime mission capable rate, operational availability, and asset ready rate.

System Requirements Analysis (SRA)

An analysis of the operational system requirements, as defined in the System Concept Paper and other approved requirements documents, used to determine specific system functional and performance requirements.

System Requirements Review (SRR) Conducted to ascertain progress in defining system technical requirements. Determines the direction and progress of the systems engineering effort and the degree of convergence upon a balanced and complete configuration.

System Security Engineering (SSE) An element of system engineering that applies scientific and engineering principle to identify security vulnerabilities and minimize or contain risks associated with these vulnerabilities. It uses mathematical, physical, and related scientific disciplines, and the principles and methods of engineering design and analysis to specify, predict, and evaluate the vulnerability of the system to security threats.

System Security Engineering Management Program (SSEMP) The contractor shall establish a SSE program to support economical achievement of overall program objectives. To be considered efficient, the SSE program: (1) enhances the operational readiness and mission success of the defense resource; (2) identifies and reduces potential vulnerabilities to the resource from sabotage, theft, damage, destruction, etc.; (3) provides management information essential to system security planning and (4) minimizes its own impact on overall program cost and schedule.

System Security Management Plan (SSMP) A formal document that fully describes the planned security tasks required to meet system security requirements, including organizational responsibilities, methods of accomplishment, milestones, depth of effort, and integration with other program engineering, design and management activities, and related systems.

System Threat Assessment Report (STAR) Required by DoD 5000.2 and validated by DIA. Establishes the threat (to a Service's Mission Area) and is part of basis for considering mission deficiency and potential program new start. Updated to support a DAB Milestone or when the threat changes significantly. (also Strategic Threat Assessment).

System-Critical Function System-Valued Asset A function that is necessary for the successful accomplishment of the system's mission.

A system element/component, function, or information element which is critical to the proper operation and well-being of the SDS.

Systems Engineering An interdisciplinary approach to evolve and verify an integrated and life-cycle balanced set of system product and process solutions.

Systems Engineering Management Plan (SEMP) This plan documents: (1) Management of the systems engineering process, (2) Integration of the required technical specialties; (3) Performance measures development and reporting, including intermediate performance criteria, and (4) Key engineering milestones and schedules.

Systems Test Integration and Coordination The combination of SDS elements tests to reflect SDS performance contribution.

T&C 1. Tracking and Control. 2. Test and Control.

T&E See Test and Evaluation.

T&T Transportation and Transportability.

T-MACH Trusted MACH.

T-UAV Tactical Unmanned Aerial Vehicle.

T/R Transmit/Receive.

T/REA Transmit/Receive Element Assembly (of a radar).

Technology Transfer.

T2E Technical Training Equipment.

TA 1. Threat Assessment. 2. Target Acquisition. 3. Test Articles.

TAA Technical Assistance Agreement.

TAACOM Tactical Air Area Commander.

TAADCOM Theater Army Air Defense Commander.

TAAF Test, Analyze and Fix.

TAC Tactical Advanced Computer.

TAC-3 Tactical Advanced Computer – Three (USN term).

TACAIR Tactical Air.

TACAMO Take Charge And Move Out [Airborne SSBN Command Post].

TACC Tactical Air Command Center.

TACC USMC Tactical Air Command Center (USMC term).

TACC USN Tactical Air Command Center (USN term).

TACCS Theater Air Command and Control System.

TACCSF Tactical Air Command and Control Simulation Facility, Kirtland AFB, NM.

TACDAR 1. Tactical Data Reporting. 2. Tactical Detection and Reporting (USN term).

TACFIRE Tactical [weapons] Fire.

TACINTEL Tactical Intelligence Information [Exchange Subsystem] (USN term).

TACOM Tank and Automotive Command (USA term).

TACON Tactical Control.

TACS Theater Air Control System.

TACSAT Tactical Satellite.

TACSIM Tactical Simulation.

Tactical Air Doctrine Fundamental principles designed to provide guidance for the employment of air power in tactical air operations to attain established objectives.

Tactical Air Operation An air operation involving the employment of air power in coordination with ground or naval forces.

Tactical Air Operations Center A subordinate operational component of the Marine Air Command and Control System designed for direction and control of all en route air traffic and air defense operations in an assigned sector.

Tactical Air Support Air operations carried out in coordination with surface forces and which directly assist land or maritime operations.

Tactical Area of Responsibility (TAOR) A defined area of land for which responsibility is specifically assigned to the commander of the area as a measure for control of assigned forces and coordination of support.

Tactical Ballistic Missile (TBM) A land-based missile generally having a range of <3000 miles that can be employed within a continental theater of operations.

Tactical Concept

A statement, in broad outline, which provides a common basis for future development of tactical doctrine.

Tactical Control

The detailed and, usually, local direction and control of movements or maneuvers necessary to accomplish missions or tasks assigned.

Tactical Data Information link A netted link in which one unit acts as a net control station and interrogates each unit by roll call. Once interrogated, that unit transmits its data to the net. This means that each unit receives all the information transmitted.

Tactical Level of War

the level of war at which battles and engagements are planned and executed to accomplish military objectives assigned to tactical units or task forces.

Tactical
Operations Area
(TOA)
Tactical
Operations Center
(TOC)

That area between the fire support coordination line and the rear operations area where maximum flexibility in the use of airspace is needed to assure mission accomplishment.

A physical grouping of those elements of an Army general and special staff concerned with the current tactical operations and the tactical support thereof.

Tactical Warning (TW)

1. A warning after initiation of a threatening or hostile act based on an evaluation of information from all available sources. 2. In satellite and missile surveillance, a notification to operational command centers that a specific threat event is occurring. The component elements that describe threat events are: country of origin, event type and size, country under attack, and event time.

Tactical Warning/Attack Assessment (TW/AA) A composite term. See separate definitions for Tactical Warning and for Attack Assessment.

TAD

- 1. Theater Air Defense. 2. Technical Acceptance Demonstration.
- 3. Tactical Air Defense.

TAD C2 Theater Air Defense Command and Control.

TADAP Theater Air Defense Asset Planner.

TADC Tactical Air Direction Center.

TADCOM Theater Air Defense Command.

TADIL Tactical Digital Information Link.

TADIL A Tactical Digital Information Link "A".

TADIL B Tactical Digital Information Link "B".

TADIL J Tactical Digital Information Link "J".

TADIX Tactical Data Information Exchange.

TADIXS Tactical Data Information Exchange System.

TADL Tactical Data Link.

TADS Tactical Air Defense System.

TADSIM Theater Air Defense Simulation.

TAF Tactical Air Force.

TAFIM Tactical Architecture Framework for Information Management.

TAI 1. International Atomic Time. 2. Target Area of Interest.

TAIS Technology Applications Information System.

TALDT Total Administrative and Logistics Downtime.

TALON NIGHT TALON programs which support SOF.

TALON SHIELD An effort using stereo DSP processing to provide ballistic missile burnout vector and

impact prediction for interceptor cueing, counterforce tasking, and passive defense.

TAM 1. Theater Attack Model. 2. Theater Analysis Model.

TAMD Theater and Missile Defense.

Tank Final Propulsion Stage (used interchangeably with sustainer).

Tank Debris Hardware associated with tank.

Tank The breakup of a tank, either intentionally to serve as a penaid or naturally as a result of

Fragmentation aerodynamic loads and heating upon reentry.

TAOC Tactical Air Operations Center.

TAOM Tactical Air Operations Module.

TAOS Technology for Autonomous Operation of Satellites.

TAR 1. The NMD Threat Assessment Report. 2. Threat Activity Report.

3. Target Acquisition Radar.

TARA Technology Area Reviews and Assessments.

TARGET Theater Analysis and Replanning Graphical Execution Toolkit.

Target Acquisition The detection and initiation of track on a target in the surveillance coverage region of a

sensing system.

Target

Classification and

Type

Identification of the estimated target category based on surveillance, discrimination, and

intelligence data.

Target

Discrimination

The ability of a surveillance or guidance system to identify or engage any one target

when multiple targets are present.

Target Object Map (TOM) A data set which contains three-dimensional position estimates for target and other objects predicted to be in a weapon interceptor's field of view for use in target

designation. (USSPACECOM)

Target Resolution The splitting of a single target into two or more targets.

Target Signature 1. The characteristic pattern of a target displayed by detection and identification

equipment. 2. In naval mine warfare, the variation in the influence field produced by

the passage of a ship or sweep.

TASA Task and Skills Analysis.

Tasks The required actions to accomplish all or part of a COA. Tasks contain guidance to the

Battle Management/Command, Control and Communications (BM/C³) engagement planning function concerning resource allocation, constraints, and required performance.

TASM 1. Tactical Air-to-Surface Missile. 2. Tomahawk Anti-Ship Missile (USN term).

TASO Terminal Area Security Officer.

TAT Technical Area Task.

TAUL Test and Upgrade Link.

TAV Transatmospheric Vehicle.

TAWG Threat Accreditation Working Group.

TB Test Bed.

TBA 1. Theater Battle Arena. 2. To Be Announced.

TBD 1. To Be Determined. 2. To Be Developed.

TBIG TMD BM/C³ Integration Group.

TBIP TOMAHAWK Baseline Improvement Program.

TBM See Tactical Ballistic Missile/Theater Ballistic Missile.

TBMD 1. Theater Ballistic Missile Defense. 2. Tactical Ballistic Missile Defense.

TBMDSE Theater Ballistic Missile Defense System Exercise.

TBN To Be Negotiated.

TBR To Be Resolved.

TBS 1. Tactical Broadcast System (USA term). 2. To Be Supplied.

3. To Be Scheduled.

TCAMS Technical Control and Monitoring System.

TCC Tactical Command Center.

TCCF Tactical Communications Control Facility.

TCE Three Color Experiment.

TCF Tactical Combat Force.

TCMD Theater Cruise Missile Defense.

TCMP 1. Theater (Missile Defense) Countermeasures Mitigation Program.

2. TheaterBallistic Missile Defense Critical Measurement Program.

TCMP I Theater Countermeasures Mitigation Program One.

TCMP II Theather Missile Defense Critical Measurement Program Two (Replaces TMD

Countermeasures Mitigation).

TCMT Total Corrective Maintenance Time (ILS term).

TCN Terrestrial Communications Network (C2E term).

TCO Tactical Combat Operations (USMC term).

TCP Transmission Control Protocol (Internet protocol).

TCS 1. Tactical Control System (USN term). 2. Time Critical System.

TCT Time critical target.

TD 1. Test Director. 2. Technical Data. 3. Technical Director.

4. Training Device (ILS term).

TDA 1. Table of Distribution and Allowance. 2. Tactical Decision Aid (USN term).

TDADT Total Distribution Advanced Technology Demonstration.

TDAS Theater Defense Architecture Study.

TDASS Theater Defense Architecture Scoping Study.

TDBM Track Data Base Manager.

TDC 1. Tactical Display Console.

2. Theater Deployable Communications (USAF MDAP).

TDCC Test Data Collection Center.

TDD Target Detection Device.

TDDS TRAP Data Dissemination System.

TDI Target Data Inventory.

TDK Two-Dimensional Kinetics nozzle performance.

TDM Time Division Multiplexed.

TDMA Time Division Multiple Access (TelComm/Computer term).

TDNS Theater Defense Netting Study.

TDOA Time Difference of Arrival.

TDP 1. See Technical Data Package. 2. Test Design Package.

3. Threat Design Program.

TDQRC Technology Demonstration, Quick-Reaction Capability.

TDR Terminal Defense Radar.

TDRSS Tracking and Data Relay Satellite System.

TDSSPA Technical Development for Solid State Phased Arrays.

TDT Target Development Test.

TDTC Test, Development and Training Center.

TDU Target Data Update.

TDUGS 1. Target Data Uplink Ground Station. 2. Target Data Update Ground Station.

TE 1. Thermo-electric 2. Test Engineer 3. Training Element

4. (BMC3) Test Exerciser. 5. Terminal Evader. 6. Test Equipment.

TEA Transportation Engineering Agency.

TEAS Test and Experiment Activity Summary.

Tech 1. Technical. 2. Technology.

TECH Technical.

TECHCON Technical Control.

TECHEVAL Technical Evaluation (USN term).

Technical Data

Scientific or technical information recorded in any form or medium (such as manuals and drawings). Computer programs and related software are not technical data; documentation of computer programs and related software are. Also excluded are financial data or other information related to contract administration.

Technical Data Package (TDP)

A technical description of an item adequate for supporting an acquisition strategy, production, engineering, and logistics support. The description defines the required design configuration and procedures to ensure adequacy of item performance. It consists of all applicable technical data such as drawings, associated lists, specifications, standards, performance requirements, quality assurance provisions, and packaging details.

Technical Evaluation

The study, investigation, or test and evaluation by a developing agency to determine the technical suitability of materiel, equipment, or a system, for use in the military services. (See Development Test and Evaluation.)

Technical Objectives

The "target" values for the development effort when insufficient data is available for stating binding technical requirements.

Technical Parameters (TPs)

A selected subset of the system's technical metrics tracked in Technical Performance Measurement. Critical technical parameters are identified from risk analyses and contract specification or incentivization, and are designed by management.

Technical Performance Measurement (TPM)

Describes all the activities undertaken by the government to obtain design status beyond that treating schedule and cost. TPM is defined as the product design assessment which estimates, through tests the values of essential performance parameters of the current design of WBS product elements. It forecasts the values to be achieved through the planned technical program effort, measures differences between achieved values and those allocated to the product element by the system engineering process, and determines the impact of these differences on system effectiveness.

Technical Specification

A detailed description of technical requirements stated in terms suitable to form the basis for actual design development and production.

Technical Surveillance

Intelligence gathering methods in which clandestine listening, photographic or emanations gathering instruments are placed within SDS facilities, or otherwise targeted against SDS assets to gain access to denied information.

Technology Executing Agent

The Service or agency (DoD or non-DoD) that has been delegated management responsibility for a particular critical supporting technology by BMDO or Executing Agent.

Technology Program Description

The generic description of the applicable supporting technology or critical supporting technology.

TECOM

Test and Evaluation Command.

TED

Technology Exploitation Demonstration.
 Theater Exploitation Demonstration.

TEIPT

Test and Evaluation Integrated Product Team.

TEL

Transporter-Erector-Launcher.

Telemetry, Tracking, and Command (TT&C) Functions performed by the satellite control network to maintain health and status, measure specific mission parameters and processing over time a sequence of these measurement to refine parameter knowledge, and transmit mission commands to the

satellite.

Teleprocessing The combining of telecommunications and computer operations interacting in the

automatic processing, reception, and transmission of data and/or information.

TELESAT Telecommunications Satellite.

TELINT Telemetry Intelligence.

TEMO Training Exercises and Military Operations.

TEMP See Test and Evaluation Master Plan.

TEMPEST TEMPEST is an unclassified short name referring to investigation and studies of

compromising emanations. It is often used synonymously for the term "compromising emanations," e.g. TEMPEST tests, TEMPEST inspection. (See Compromising

Emanations.)

TENCAP Tactical Exploitation of National Capabilities.

TEP Test and Evaluation Plan.

TER Test and Evaluation Report.

TERC Test and Evaluation Resource Committee.

TERCOM Terrain Contour Matching.

Terminal The guidance applied to a guided missile between midcourse and arrival in the vicinity

Guidance of the target.

Terminal Phase That final portion of a ballistic missile's trajectory between the midcourse phase and

trajectory termination.

Terminal Phase Interceptor

A ground-based interceptor designed to intercept and destroy RVs in the terminal phase of flight. It may also be assigned to intercept and destroy enemy PBVs and RVs in the

midcourse phase. (USSPACECOM)

Terminator Transition from sunlight to earth's shadow in space.

TERS Tactical Event Reporting System.

TES 1. Tactical Event System. 2. Test and Evaluation Summary.

3. Theater Event System.

TESP Test and Evaluation Security Plan.

TESSE Test Environment Support System Enhancement.

Test and Control The ISTC Test and Control provides the human interface for testing system hardware

and software. The Test and Control will consist of the necessary consoles, processors, and storage devices in order to be able to control all operations of the ISTC such as configuring the system, running a scenario, analyzing data, generating reports, and

testing system hardware and software.

Test and Evaluation (T&E)

Process by which components or systems are tested and the results evaluated to assess progress of design, performance, supportability, etc. There are three types of T&E --Development (DT&E), Operational (OT&E), and Production Acceptance (PAT&E)-occurring during the acquisition cycle. DT&E is conducted to assist the engineering design and development process, to proof manufacturing processes and control and to verify attainment of technical performance specifications and objectives. conducted to estimate a system's operational effectiveness and suitability, identify needed modifications, and provide information on tactics, doctrine, organization, and personnel requirements. PAT&E is conducted on production items to demonstrate that those items meet the requirements and specifications of the procuring contracts or agreements. OT&E is further subdivided into two phases--Initial Operational (IOT&E) and Follow-on Operational (FOT&E). IOT&E must be conducted before the production decision (Milestone III) to provide a credible estimate of operational effectiveness and suitability. Therefore, IOT&E is a field test conducted on a production representative system in an operationally realistic environment, by typical user personnel and includes use of realistic threats. FOT&E is conducted on the production system to verify operational effectiveness and suitability, to fill data voids from the IOT&E, or to verify correction of deficiencies in materiel, training, or concepts.

Test and Evaluation Master Plan (TEMP)

An overall test and evaluation plan, 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. Prepared as early as possible in the acquisition process, it is updated as development progresses.

Test and Evaluation Working Group (TEWG) The TEWG is the forum in which T&E coordination for test requirements, planning, execution, and reporting, is accomplished among members of the Acquisition Team. The primary purpose of the TEWG is to optimize the use of test data, instrumentation, facilities, and models/simulations to achieve test integration and reduce program costs. The TEWG is established by the program sponsor to integrate test requirements, resolve cost/scheduling problems, facilitate TEMP development, assist in preparation of RFPs and related contractual documents, and assist in evaluating contractor proposals when there are T&E implications.

Test Criteria

Standards by which test results and outcome are judged.

Test Integration Working Group (TIWG) A working group designed to facilitate the integration of test requirements in order to minimize development time and cost and preclude duplication between developmental and operational testing.

Test Plan

A document prescribing the approach to be taken for intended testing activities. The plan typically identifies the items to be tested, the testing to be performed, test schedules, personnel requirements, reporting requirements, evaluation criteria, and any risk requiring contingency planning.

Test Validity

The degree to which a test accomplishes its specified goal.

Testbed

A system representation consisting partially of actual hardware and/or software and partially of computer models or prototype hardware and/or software.

TEV

Test, Evaluation and Verification.

TEVS

1. Test Environment System. 2. Test Environment Support Systems.

TEWG

See Test and Evaluation Working Group.

TEx

Test Exerciser (NMD BMC3 term).

TEXCOM Test and Experimentation Command.

TF Task Force.

TFC Tactical Fusion Center.

TFCC Tactical Flag Command Center (USN term).

TFD Technical Feasibility Decision.

TFE Thermionic Fuel Element(s).

TFIM Technical (Architecture) Framework for Information Management.

TFOV Theoretical Field of View.

TFR Terrain Following Radar.

TFRAMES Tools to Facilitate the Rapid Assembly of Missile Engagement Simulations.

TFT Time Off Target (JFACC term).

TFW Tactical Fighter Wing (USAF term).

TG 1. Threat Generator. 2. Trajectory Generator.

TGINFOREP Target Information Report (JFACC term).

TGS Track Generation System (USN term).

TGW Terminally-Guided Warhead.

THAAD See Theater High Altitude Area Defense System.

Theater The geographical area outside the continental United States for which a commander of a

unified or specified command has been assigned.

Theater Attack Attack on a geographical area outside the continental United States.

Theater Ballistic Missile Defense (TBMD) System Theater High Altitude Area **Defense System**

ballistic missile attacks within an overseas theater of operations. (USSPACECOM) A ground-based, air transportable interceptor system that will provide wide area defense

The aggregate TMD C3I and TBMD forces that, in total, provide defense against

(THAAD) Theater Missile capability by intercepting longer range missiles at higher altitudes and at greater distances. Will provide an overlay or upper tier to point defenses such as PATRIOT.

(TM)

A theater missile (TM) is a ballistic missile (BM), cruise missile (CM), or air-tosurface guided missile (ASM) whose target is within a theater or which is capable of

attacking targets in a theater.

Theater Missile Defense (TMD)

The strategies and tactics employed to defend a geographical area outside the continental United States against attack from short-range, intermediate-range, or

medium-range ballistic missiles.

Theater Missile Defense Council (TMDC) A consultative body for considering TMD family of systems planning and programming issues; chaired by an Assistant to the BMDO Deputy for Acquisition/TMD, membership includes BMDO TMD Directors, representatives of each applicable Service Program Executive Officer, and TMD Executive Agents and Program Managers.

Theater Missile Defense Ground-Based Radar (TMD-GBR) A ground-based, air transportable sensor that provides search, tracking and discrimination capabilities for the THAAD interceptor system. Also referred to as THAAD Radar.

Theater Missile Defense Initiative (TMDI) An initiative under which all DoD theater and tactical missile defense activities are carried out. Section 231 of the National Defense Act for Fiscal Year 1993 (Public Law 102–484) directed establishment of a TMDI office within the DoD.

THEL

Tactical High Energy Laser.

Thermal Energy

Electromagnetic energy emitted as thermal radiation. The total amount of thermal energy received per unit area at a specified distance is generally expressed in terms of calories per square centimeter.

Thermal Imagery

Imagery produced by sensing and recording the thermal energy emitted or reflected from the objects which are imaged.

Thermal Kill

The destruction of a target by heating it, using directed energy, to the degree that structural components fail.

Thermal Management Technologies/techniques associated with the control and management of thermal energy, its generation, dissipation, and recovery.

Thermal Radiation

Electromagnetic radiation emitted (in two pulses from a nuclear air burst) from the fireball as a consequence of its very high temperature; it consists essentially of ultraviolet, visible, and infrared radiations.

Thermal X-Rays

The electromagnetic radiation, mainly in the soft (low energy) x-ray region, emitted by the nuclear weapon residue by virtue of its extremely high temperature; it also is referred to as the primary thermal radiation. It is the absorption of this radiation by the ambient medium, accompanied by an increase in temperature, which results in the formation of the fireball (or other heated region) which then emits thermal radiation. (See X-Rays.)

Thermosphere

The atmospheric shell extending from the top of the mesosphere to outer space; it is a region of more or less steadily increasing temperature with height, starting at 40 to 50 miles (70 to 80 kilometers); the thermosphere includes, therefore, the exosphere and most or all of the ionosphere.

Threat Characterization An assessment of the nature, magnitude and intent of an attack in progress.

Threat Corridor (Threat Tube)

A tube containing all the objects originating from launch sites and aimed at targets whose spacing is close enough to permit the tube around the object trajectories to be represented by a single trajectory in battle management computation.

Threat Scenario

A hypothetical example of the employment of threat systems against ballistic missile defenses for the purpose of analysis and evaluation of those defensive systems and architectures.

Threshold Performance capability or characteristic level in terms of a minimum acceptable value

(threshold) required to satisfy the mission need and a performance objective.

Threshold Defense A defense strategy that concedes that the target can be destroyed at a price that is not

prohibitive, but the presence of the defense is thought to require the offense to mount a

relatively large and complex attack.

Throw Weight All weight in an interceptor, above the sustainer, which serves as the kill vehicle.

Thrusted Replicas (TREPS)

Conical decoys equipped with a miniature rocket device. Generally used to change the

decoy's optical signature to resemble that of an RV in the reentry phase.

TI 1. Technical Instruction. 2. Technology Insertion.

TIARA Tactical Intelligence and Related Activities.

TIBS 1. Theater Information Broadcast Service.

> 2. Tactical Information Broadcast System. 3. Theater Intelligence Broadcast System.

TIC 1. Thermionic Integrated Circuit. 2. Technical Information Center.

TIDP Technical Interface Design Plan.

TIE 1. Technology Integration Experiments. 2. Technical Independent Evaluation.

Tier An integrated set of SDS elements that addresses a particular phase of the threat (e.g.,

boost phase).

Tiered Defenses The use of defensive systems at different phases of the missile trajectory.

TIES Technology Integration Equipment System.

TIIAP Telecommunications and Information Infrastructure Assistance Program.

TIL Technical Insertion Laboratory.

TIM 1. Technical Interchange Meeting. 2. Technical Information Meeting.

Time of Flight (Max)

The maximum time for a booster or vehicle to perform its function from time of launch.

Time on Station

The time the sensor is in its operating position.

Time Sensitive Targets

Those targets requiring immediate response because they pose (or will soon pose) a clear and present danger to friendly forces or are highly lucrative, fleeting targets of opportunity.

Time to Station The time required to move a sensor to its operating position.

Time-Phased Force and **Deployment List** Appendix 1 to Annex A of the operation plan. It identifies types and/or actual units required to support the operation plan and indicates origin and ports of debarkation or

ocean area.

TIMS Training Integration Management System (USAF term).

TIN 1. Theater Intelligence Networks. TIP 1. TOPAZ International Program. 2. Technology Insertion Program/ Plan.

TIR 1. OBSOLETE. Terminal Imaging Radar. (Predecessor to Ground-Based Radar

Terminal (GBRT).) 2. Thermal Imaging Radar.

TIRS Telemetry, Instrumentation and Range Safety

TIS 1. Trusted Information Systems, Inc. 2. Technical Information System.

Titan US ICBM.

TIU TIBS/Tactical Interface Unit.

TIWG Test Integration Working Group. (U.S. Army).

TL Team Leader.

TLA Time Line Analysis.

TLAM 1. Theater land Attack Missile. 2. Tomahawk Land Attack Missile (USN term).

TLAM/D TLAM [with submunition] Dispenser (Navy term).

TLDD Top Level Design Document.

TLV Target Launch Vehicle.

TLX Teletype.

TM 1. See Theater Missile. 2. Technical Manual. 3. Tactical Missile (USA term).

TMCC Test Monitor and Control Center.

TMD 1. See Theater Missile Defense. 2. Tactical Missile Defense (USMC term).

TMD C2 Theater Missile Defense Command and Control.

TMD C3I Those assets that provide connectivity between and among Theater Ballistic Missile

Defense forces.

TMD ESM Theater Missile Defense Existing System(s) Modification (BMDO term).

TMD GBR Theater Missile Defense Ground-Based Radar (THAAD Radar).

TMD IA Theater Missile Defense Interoperability Architecture.

TMD ITP TMD Integrated Test Plan.

TMD-GBR See Theater Missile Defense Ground-Based Radar.

TMDAS Theater Missile Defense Architecture Study.

TMDC Theater Missile Defense Council.

TMDE Test Measurement and Diagnostic Equipment (ILS term).

TMDI See Theater Missile Defense Initiative.

TMDSE Theater Missile Defense System Exerciser at JNTF.

TMMM TOMAHAWK Multi-Mission Missile.

TMP Technical Manual Plan (ILS term).

TMPCU Tomahawk Theater Mission Planning Center Upgrade.

TN 1. Terrestrial Network (C2E term). 2. Thermonuclear.

TNF Theater Nuclear Forces [Treaty term].

TNT Trinitrotoluene.

TNW Theater Nuclear Weapon.

TO 1. Task Order. 2. Technical Order.

TOA 1. Time of Arrival. 2. Total Obligation Authority (Financial Management term).

TOAM Tactical Air Operations Module.

TOC 1. Tactical Operations Center. 2. Telemetry Operations Control.

3. Testbed Oversight Committee.

TOE Table of Organization and Equipment.

TOF Time of Flight.

TOI Track of Interest.

TOIA Task Order Impact Analysis.

Tolerance The ability of a system to provide continuity of operation under various abnormal

conditions.

TOM See Target Object Map.

Tomahawk US ground-launched cruise missile.

TOMD Task Radar Management Details.

TOMP Task Order Management Plan.

TOMS Total Ozone Mapping Spectrometer (NASA term).

TOO Target of Opportunity.

TOOL Target of Opportunity Launch.

TOP Task Order Plan.

Top-Down Pertaining to an approach that starts with the highest level component of a hierarchy and

proceeds through progressively lower levels; for example, top-down design, top-down

programming, top-down testing. Contrast with bottom-up.

Top-Down Design The process of designing a system by identifying its major components, decomposing them into their lower level components, and iterating until the desired level of detail is

achieved.

Top-Down Testing

The process of checking out hierarchically organized programs, progressively, from top

to bottom, using simulation of lower level components.

TOPAZ

A project to demonstrate the transfer of Russian thermionic space nuclear power technology to U.S. BMD applications.

TOR Terms of Reference.

TOS 1. Tactical Operations Shelter (Station). 2. Task Order Status.

TOT Time On Target (JFACC term).

Total Obligational Authority (TOA)

A DoD financial term which expresses the value of the direct program for a given fiscal

A management philosophy committed to a focus on continuous improvement to product

year.

Total Quality management (TQM)

TOTS Target Oriented Tracking System.

TOVS TRIOS Operational Vertical Sounder.

Toxicity The kind and amount of poison or toxic produced by a microorganism, or possessed by a

and services with the involvement of the entire workforce.

chemical substance not of biological origin.

TP 1. Telenet Protocol (TelComm/Computer term). 2. Test Program.

TPALS Theater Protection Against Limited Strikes.

TPBM Terminal Phase Battle Manager.

TPD Mobile Tactical Radar (US).

TPDR Total Processing Data Rate (TelComm/Computer term).

TPEC THAAD Performance Evaluation Center.

TPEM Technology Program Element Manager (SDIO/BMDO term).

TPFDD Time-Phased Force Deployment Data.

TPFDDL Time Phased Force Deployment Data List.

TPFDL Time-Phased Force Deployment List.

TPM See Technical Performance Measurement.

TPMT Total Preventative Maintenance Time (ILS term).

TPO 1. Test Planning Organization. 2. THAAD Program Office

TPP Test Procedure Plan.

TPR 1. Terminal Phase Radar. 2. Trained Personnel Requirements.

3. Target Performance Report.

TPS 1. Thermal Protection System.

2. Test Program Set (Support and Test Equipment term).

3. Technical Publishing Software. 4. Translator Processing System.

TPT 1. Theater Planning Tool. 2. Test Planning Tool.

TPWG Test Planning Working Group. (U.S. Air Force)

TQM Total Quality Management.

TR Technical Roundtable (PAC-3 term). 3. Trouble Report (ILS term).

Traceability 1. The characteristic of software systems or designs or architectures or domain models that identifies and documents the derivation path (upward) and allocation/flowdown path (downward) of requirements and constraints. 2. The degree to which a relationship can be established between two or more products having a predecessor-successor or master-

subordinate relationship to one another.

Track 1. A series of related contacts displayed on a plotting board. 2. To display or record the successive positions of a moving object. 3. To lock onto a point of radiation and obtain guidance therefrom. 4. To keep a gun properly aimed, or to point continuously a targetlocating instrument at a moving target. 5. The actual path of an aircraft above, or a

ship on, the surface of the earth.

Track Assessment The Track Assessment looks for anomalies in an object's track data. An anomaly in the

track may indicate a hit.

Track Correlation The combining of track information for identification purposes, using all available data.

Track Extension This term usually applies to improvements in track estimates by use of new data. It is sometimes used to describe a process of target extrapolation to a future time or place

(e.g., reentry).

Track File A target's stated estimate, confidence, covariance matrix, and associated LOS

measurements with irradiances with confidence of association; or some subset of the

above.

Track File-Track

History

A set of individual track reports on a particular object, which taken together produce

useful approximation of that object's future position in space.

Track Formation The process of determining the track or tracks of detected objects. It is usually a three-

step process of data association, track initialization, and track improvement by filtering.

Track Initiation The formation of the first or initial estimate for a sensor system of the state vector of an

object. The process typically requires observation from a number of frames.

Track Production

Area

An area in which tracks are produced by one radar station.

Track Symbology Symbols used to display tracks on a data console or other display device. Track Telling The process of communicating air surveillance and tactical data information between

command and control systems or between facilities within the systems. Telling may be classified into the following types: back tell; cross tell; forward tell; lateral tell; overlap

tell; and relateral tell.

Track, Birth to

Death

The maintenance of an associated track through all phases of flight (i.e., boost to

reentry).

Tracking The act of generating and maintaining a time history of an object's position and any

other features of interest.

Tracking and

Pointing

Once a target is detected, it must be followed or "tracked". When the target is successfully tracked, a weapon is "pointed" at the target. Tracking and pointing are

frequently integrated operations.

Tracking Range

(Max) TRADEX The maximum line of sight distance at which a sensor can maintain track of an object.

Target Resolution and Discrimination Experiment.

TRADOC Training and Doctrine Command, Ft. Monroe, VA. (U.S. Army)

Traffic Capability Maximum The maximum number of objects per unit time which the sensor system can maintain

track files.

Traffic Decoy Decoy that matches RV characteristics in the exoatmosphere and high endoatmosphere.

Train Threat geometry with objects placed in a line (string) along the velocity vector of

reentry.

Trajectory The curve described by an object moving through space.

Trajectory Histories Trajectory information on targets recorded over a period of time.

TRAK A data base management system (not an acronym).

Trans-Attack Period from first tactical indication of attack until termination started, i.e., post-attack.

TRANSCOM [U.S.] Transportation Command, Scott AFB, IL.

TRANSEC See Transmission Security.

Transition The period in which the world strategic balance would shift from offense-dominance to

defense-dominance.

Transition to **Production**

A risk reduction process during which the program shifts (passes) from development to production. It is not an exact point, but is described as a process consisting of disciplined engineering and logistics management to ensure the system is ready for

manufacture. (See DoD 4245.7-M.)

Transmission Security (TRANSEC) Transonic That component of security which results from all measures designed to protect communications transmissions from interception and traffic analysis. (See COMSEC.)

Of or pertaining to the speed of a body in a surrounding fluid when the relative speed of the fluid is subsonic in some places and supersonic in others. This is encountered when

passing from subsonic to supersonic speeds and vice versa.

Transponder A receiver-transmitter that will generate a reply signal upon proper interrogation.

TRAP 1. Tactical Receiver and Related Applications.

2. Tactical Receive Applications Program.

3. Threat Risk Assessment Program. 4. TRE and Related Applications.

Trap Door A hidden software or hardware mechanism that permits system security mechanisms to

be circumvented.

Traveling Wave Tube (TWT)

An electronic tube in which a stream of electrons interact continuously or repeatedly with a guided electromagnetic wave moving substantially in synchronism with it, in such a way that there is a net transfer of energy from the stream to the wave; the tube is used as an amplifier or oscillator at frequencies in the microwave region.

Traverse 1. To turn a weapon to the right or left on its mount. 2. A method of surveying in

which lengths and directions of lines between points on the earth are obtained by or from

field measurements, and used in determining positions of the points.

Traverse Level That vertical displacement above low-level air defense systems, expressed both as a

height and altitude, at which aircraft can cross the area.

TRB Tactical Review Board.

TRD Technical Requirements Document.

TRE Tactical Receive Equipment.

TREA Transmit/Receive Element Array (THAAD).

TREE Transient Radiation Effects on Electronics.

TREM Total Radiation Environment Model.

TREPS See Thrusted Replicas.

TRESIM Tactical Receive Equipment Simulator.

TRG Threat Reference Guide.

TRI-TAC Tri-Service Tactical Digital Communications System.

TRIDENT Class of US ballistic missile submarines (USN term).

TRIDENT I (C-4) US SLBM (USN term).

TRIDENT II (D-5) US SLBM (USN term).

TRIM Toxic Reduction Investment and Management.

TRM Technical Reference Model.

TRMP Test Resources Management Plan.

TRN 1. Task Requirements Notice. 2. Test Requirements Notification.

Trojan Horse A computer program with an apparently or actually useful function that contains

additional (hidden) functions that surreptitiously exploit the legitimate authorizations of

the invoking process to the detriment of security or mission performance.

TROPO Tropospheric Scatter.

Tropopause The imaginary boundary layer dividing the stratosphere from the lower part of the

atmosphere, the troposphere. The tropopause normally occurs at an altitude of about 7.62km to 13.71km in polar and temperate zones, and at 16.76km in the tropics. (See

Stratosphere, Troposphere.)

Troposphere The region of the atmosphere, immediately above the earth's surface and up to the

tropopause, in which the temperature falls fairly regularly with increasing altitude, clouds form, convection is active, and mixing is continuous and more or less complete.

Tropospheric

Scatter

The propagation of electromagnetic waves by scattering as a result of irregularities in

the physical properties of the troposphere.

TRP 1. Test Readiness Program. 2. Technology Reinvestment Program.

3. Technology Readiness Program (pre-acquisition program status).

4. Technical Requirements Package.

TRPC Technology Readiness Planning Committee.

TRR Test Readiness Review.

Trusted Computer System/Software

A system or its software that employs sufficient hardware and software integrity

measures to allow its use for processing sensitive or classified information.

Trusted Path A mechanism by which a person at a terminal can communicate directly with the

Trusted Computing Base. This mechanism can only be activated by the person of the

Trusted Computing Base and cannot be imitated by untrusted software.

TRW, Inc.

TS 1. Terminal Service. 2. Top Secret. 3. Talon Shield.

TSA Technology Security Analysis.

TSB Target Signatures and Backgrounds.

TSCM Tomahawk Strike Coordination Module (USN term).

TSD Tactical Surveillance Demonstration.

TSDE Tactical Surveillance Demonstration Enhancement.

TSEU Technology Seeker Evaluation Unit.

TsIAM Moscow's Central Institute of Aviation Motors.

TSM 1. TRADOC System Manager. 2. Time-Share-Multiplex.

3. Training and Doctrine Command (TRADOC) Systems Manager

TSMA Theater of Strategic Military Action.

TSP Target Support Plan.

TSPI Time, Space, Position Information.

TSR Target System Requirements.

TSRD Target System Requirements Document.

TSS Terminal Surveillance Sensor.

TSSAM Tri-Service Standoff Attack Missile.

TSWG Target Signature Working Group.

TT Total Time.

TT&C See Telemetry, Tracking and Command.

TT&E 1. Technical Test and Evaluation (Army). 2. Targets, Test & Evaluation.

TTA Total Time Accounting.

TTBM Terminal Tier Battle Manager.

TTBT Threshold Test Ban Treaty.

TTD&D Test Technology Development and Demonstration. A portion of the CTEIP program

which funds the development and demonstration of technologies which have significant

potential for improving testing.

TTEL Tools and Test Equipment List (ILS term).

TTL Transistor to Transistor Logic.

TTP Tactics, Techniques, and Procedures.

TTSARB Technology Transfer and Security Assistance Review Board.

TTT Test Technology Transfer.

TTV Technology Test Vehicle.

TTY Teletype.

TUG TRACE User Group.

TV Thrust Vectoring (rocket engineering term).

TVC Thrust Vector Control.

TVE Technology Validation Experiment.

TVM 1. Track-via-missile (USA term). 2. Thrust Vector Maneuver.

TVV Technology Validation Vehicle.

TW See Tactical Warning.

TW/AA See Tactical Warning/Attack Assessment.

TW/SD Tactical Warning and Space Defense.

TWG 1. Technical Working Group. 2. Threat Working Group.

TWS TOMAHAWK Weapons System (USN term).

TWT See Traveling Wave Tube.

TWTA Traveling Wave Tube Amplifier (Electronics Engineering term).

TY Then Year (PPBS term).

TY\$M Then Year Dollars Millions.

Type A - System Specification

States all necessary requirements in terms of performance, including test provisions to assure that all requirements are achieved. Essential physical constraints are included. Type A specifications state the technical and mission requirements of the system as an

entity.

Type B -Development Specification States all necessary requirements in terms of performance. Essential physical constraints are included. Type B specifications state requirements for the development of items other than systems. They specify all of the required item functional characteristics and the tests required to demonstrate achievement of those characteristics.

Type C - Product Specification

Product specifications are applicable to any item below the system level, and may be oriented toward procurement of a product through specification of primarily function (performance) requirements or fabrication (detailed design) requirements. Type C specifications are intended to be used for the procurement of items including computer programs.

Typhoon Class of Soviet ballistic missile submarines.

Typing The act of recognizing objects by measuring a set of observables, computing a set of

characteristics, and associating the characteristics with a specific class of objects (i.e.,

SS-18, SS-24).

U Uranium.

U&S Unified and Specified [commands] (pre-1996 term).

U. S. (US) United States.

U.K. (**UK**) United Kingdom.

U.S. West Incorporated.

U.S.S.R. Union of Soviet Socialist Republics.

UA User Assessment (NMD BMC3 term).

UAE United Arab Emirates.

UAV Unmanned Aerial Vehicle.

UAV BPI Unmanned Aerial Vehicle-based Boost Phase Intercept.

UCAP UAV Comabt Air Patrol.

UCC Uniform Commercial Code (US legal term).

UCP Unified Command Plan (OJCS term for CINC's AOR).

UD/ASD United Defense/Armaments Systems Division.

UDMH Unsymetrical Dimethylhydrazine (a liquid propellant rocket fuel).

UDS Universal Documentation System. A standardized comprehensive tool for stating and

coordinating program requirements for testing on MRTFB ranges, as well as the capabilities and plans of test ranges to support program requirements. It consists of a series of six planning and execution documents: 10 the Program Introduction (PI) (also called the Program Introduction Document (PID)), 2) Statement of Capability (SC), 3) Program Requirements Document (PRD), 4) Operations Requirements (OR), 5) Program Support Plan (PSP), and 6) the Operations Directive (OD). The UDS was

developed and is regulated by the Range Commanders Council (RCC).

UE Unit Equipment.

UEME Unified Electro-Magnetic Effects.

UEWR Upgraded Early Warning Radar.

UEWRS Upgraded Early Warning Radar System.

UF4 Uranium tetrafluoride.

UF₆ Uranium hexafluoride.

UFG User Focus Group.

UFO UHF Follow-On [Satellite Communications System].

UFP Unit Flyaway Price.

UGF Underground Facility.

UGS Unattended Ground Sensors.

UGT Under Ground Test.

UHF Ultra High Frequency.

UIC Unit Identification Code.

UIN User Interaction Node.

UKAS 1. UK Architecture Study 2. UK Associate Studies.

UKEADTB UK Extended Air Defense Test Bed.

UKTB United Kingdom Test Bed.

ULCS Unit Level Circuit Switch (SINCGARS term).

ULS Unit Level Switch.

ULSA Ultra Low Sidelobe Antenna.

ULTDS Unit Level Tactical Data Switch (SINCGARS term)

Ultraviolet (UV) Electromagnetic radiation of wavelength between the shortest visible violet (about 3,850

Angstroms) and soft x-rays (about 100 Angstroms).

UMD Unit Manning Document.

UMMIPS Uniform Material Movement and Issue Priority System (ILS term).

UN United Nations.

UNAAF Unified Action Armed Forces.

UNC United Nations Command.

Unconventional Warfare A broad spectrum of military and paramilitary operations conducted in enemy-held, enemy-controlled or politically sensitive territory. Unconventional warfare includes, but is not limited to, the interrelated fields of guerrilla warfare, evasion and escape, subversion, sabotage, and other operations of a low visibility, covert, or clandestine

nature.

Unified Action Armed Forces A publication setting forth the principles, doctrines, and functions governing the activities and performance of the Armed Forces of the United States when two or more

Services or elements thereof are acting together.

of significant assigned components of two or more Services, and which is established and so designated by the President, through the Secretary of Defense with the advice

and assistance of the Joint Chiefs of Staff.

UNISYS Corporation.

United States

Army

Space Command (USARSPACE)

The Army component command of USSPACECOM. Responsible for the Army elements

of the SDS system. Located in Colorado Springs, CO.

United States Space Command (USSPACECOM) The unified command responsible for planning and conducting ballistic missile defense.

ace Command Located in Colorado Springs, CO.

United States Strategic Command (USSTRATCOM) The DoD unified command responsible for carrying out directed nuclear and non-nuclear strategic air, intercontinental ballistic missile, and sea-launched ballistic missile offensive combat strikes. Located at Offutt AFB, NE.

United States Transportation Command (USTRANSCOM) The DoD unified command responsible for providing air, land, and sea transportation for the Department of Defense, both in time of peace and time of war. It is also responsible for providing airlift, sealift, surface transport, and terminal services, and commercial air, land, and sea transportation, including as needed to support the deployment, employment, and sustainment of U.S. forces on a global basis, as directed by the Secretary of Defense. Located at Scott AFB, IL.

unk Unknown.

Unresolved Objects Objects so closely spaced with respect to the sensor focal plane as to be

indistinguishable from a single object.

UNSC United Nations Security Council.

UnSecEnergy Under Secretary of Energy.

UOC Usable on Code (ILS term).

UOES See User Operational Evaluation System.

UPD Unconventional Passive Discrimination.

UPS Uninterruptible Power Source.

UQT Unit Qualification Training (ILS term).

URIP University Research Initiative Support Program.

URL Uniform Resource Locator (Internet protocol term).

URT Upgraded RTD.

US/UK United States/ United Kingdom.

USA 1. United States Army. 2. Under Secretary of the Army.

3. United States of America

USAADASCH U. S. Army Air Defense Artillery School.

USAAE U.S. Army Acquisition Executive.

USACE United States Army Corps of Engineers.

USACOM United States Atlantic Command, Norfolk, VA.

USAF United States Air Force.

USAF/AFMC/ESC U.S. Air Force Materiel Command, Electronic Systems Center; ex-ESD.

USAF/AFMC/SMC U.S. Air Force Materiel Command, Space and Missile Systems Center; ex-USAF

Systems Command/SSD.

USAF/OTEC U.S. Air Force Operational Test and Evaluation Center.

USAF/SMC U.S. Air Force Space and Missile Systems Center, Los Angeles AFB, CA.

USAF/SSD U. S. Air Force/Space Systems Division; See USAF/AFMC/SMC.

USAFE U.S. Air Forces in Europe.

USAFLANT U.S. Air Force, U.S. Atlantic Command.

USAKA U.S. Army Kwajalein Atoll.

USAMICOM U.S. Army Missile Command, Redstone Arsenal, AL.

USAMSIC see MSIC.

USAMSAA U.S. Army Materiel Systems Analysis Activity.

USAOEC U.S. Army Operational Evaluation Command, Alexandria, VA.

USAOTEC U.S. Army Operational Test and Evaluation Command.

USARCENT U.S. Army Forces, U.S. Central Command.

USAREUR U.S. Army Forces, U.S. European Command.

USARLANT U.S. Army Forces, U.S. Atlantic Command.

USARPAC U.S. Army Forces, U.S. Pacific Command.

USARSPACE See United States Army Space Command.

USASDC U. S. Army Strategic Defense Command (< 10ct 92).

USASSDC U.S. Army Space and Strategic Defense Command, Huntsville, AL.

USATECOM U.S. Army Test and Evaluation Command

USATRADOC U.S. Army Training and Doctrine Command.

USB Upgraded SBD.

USC U.S. Code.

USCENTAF U.S. Central Command Air Forces.

USCENTCOM United States Central Command, MacDill AFB, FL.

USCG United States Coast Guard.

USCINCCENT Commander in Chief, U.S. Central Command.

USCINCEUR U.S. Commander in Chief, Europe.

USCINCLANT Commander-in-Chief, U.S. Atlantic Command.

USCINCPAC Commander-in-Chief, U.S. Pacific Command.

USCINCSPACE Commander-in-Chief, U.S. Space Command.

USCINCTRANS Commander in Chief, U.S. Transportation Command.

USCS U.S. Customs Services.

USD Under Secretary of Defense.

USD(A&T) Undersecretary of Defense (Acquisition and Technology).

USD(A) OBSOLETE. Under Secretary of Defense (Acquisition).

USD(A)/STNF Under Secretary of Defense, Acquisition, Strategic and Tactical Nuclear Forces.

USD(P) Under Secretary of Defense for Policy.

USDA United States Department of Agriculture.

USDAO U.S. Defense Attaché Office.

USDELMC U.S. Delegation to the NATO Military Committee.

USDR&E OBSOLETE. Under Secretary of Defense for Research and Engineering.

User Friendly Primarily a term used in automatic data processing (ADP); it connotes a machine

(hardware) or program (software) that is compatible with a person's ability to operate it

successfully and easily.

User Operational Evaluation System

(UOES)

Prototypical system developed and tested as part of the early phases of the development process. A UOES has two objectives: (1) testing, evaluation, and training for a system proceeding through the normal acquisition process; and (2) contingency defense capability should the need arise prior to completion of the normal acquisition cycle.

USEUCOM United States European Command, Stuttgart-Vaihingen, Germany.

USFJ U.S. Forces Japan.

USFK United States Forces Korea, US Army Garrison, Yong San (USAGY), Seoul, Republic

of Korea.

USFK/CFC USFK Combined Forces Command.

USG U.S. Government.

USIA United Stated Information Agency.

USLANTCOM United States Atlantic Command (Now see USACOM).

USLANTFLT U.S. Atlantic Fleet.

USMAR- U.S. Marine Component, U.S. Central Command.

FORCENT

USMAR- U.S. Marine Component, U.S. Atlantic Command.

FORLANT

USMAR-FORPAC U.S. Marine Component, U.S. Pacific Command.

USMC United States Marine Corps.

USMCR United States Marine Corps Reserve.

USMILREP U.S. Military Representative.

USN United States Navy.

USNAVCENT U.S. Naval Forces, U.S. Central Command.

USNAVEUR U.S. Naval Forces, U.S. European Command.

USNIP U.S. Naval Institute Proceedings.

USNO U.S. Naval Obervatory.

USNPGS U.S. Naval Post-Graduate School.

USPACAF U.S. Air Forces, U.S. Pacific Command.

USPACFLT U.S. Pacific Fleet.

USPACOM United States Pacific Command, Pearl Harbor, HI.

USREPMC U.S. Representative to the Military Committee (NATO).

USSC United States Space Command.

USSOCOM United States Special Operations Command, Tampa, FL.

USSOUTHCOM United States Southern Command, Panama Canal Zone, Panama.

USSPACECOM See United States Space Command.

USSR OBSOLETE. Union of Soviet Socialist Republics.

USSS United States Secret Service.

USSTRATCOM See United States Strategic Command.

USTA United States Telephone Association.

USTRANSCOM See United States Transportation Command.

UT Universal Time.

 Unit Type Code.
 United Technologies Corporation.
 Universal Time Constant. UTC

UTMUniversal Transverse Mercator.

UTTMDS Upper Tier Theater Missile Defense System. See THAAD System.

UUT Unit Under Test (ILS term).

UV Ultraviolet.

Technologies/techniques employed by optical sensors in the wavelength spectrum **UV Electro-Optics**

shorter than visible (e.g., less than 4,000 A).

UVPI Ultraviolet Plume Instrument.

 $\mathbf{U}\mathbf{W}$ Unconventional Warfare. V Volt.

V&H Vulnerability and Hardening.

V&V Verification and Validation. (See Verification, Validation, and IV&V.)

V/STOL Vertical Short Takeoff and Landing [aircraft].

VAFB Vandenberg Air Force Base, CA.

Validation Confirmation that the processes and outputs from a test resource parallel real world

processes and are realistically sensitive to change in the environment, tactical situation,

system design, tactics, and threat.

VAMOSC Visibility and Management of O&S Costs.

VAR Visitor Access Request.

Variability The manner in which the probability of damage to a specific target decreases with the

distance from ground zero; or, in damage assessment, a mathematical factor introduced to average the effects of orientation, minor shielding, and uncertainty of target response

to the effects considered.

VBO Vertical Burn-Out (velocity).

VCC Voice Communications Circuit.

VCJCS Vice Chairman, Joint Chiefs of Staff.

VCRM Verification Cross Reference Matrix.

VCS Voice Communications System.

VDC Volts Direct Current.

VDD Version Description Document.

VDU Visual Display Unit.

VE Value Engineering.

VECP Value Engineering Change Proposal.

Verification 1. Confirmation that all data inputs, logic, calculations and engineering representations

of a T&E resource accurately portray the characteristics, calculations, logic, and interactions of the system under evaluation. 2. The process of evaluating a system or component during or at the end of the development process to determine whether it

satisfies specified requirements.

VESA Video Electronics Standards Association.

VFR Visual Flight Rules.

VGA Video Graphics Array (TelComm/Computer term).

VHF Very High Frequency.

VHSIC Very High Speed Integrated Circuit.

VIDS Vehicle Integrated Defense Software (USA term).

VIGILANTE Viewing Image/Gimbaled Instrumentation Lab-Analog Neural Three-d Experiment.

VIGILANTE involves building a small computer (ANTE) offering 1/12 Operation Per Second (OPS), using a mixture of experimental three-dimensional circuitry and commercial components. Project also demonstrates VIRGIL, a gimbaled airborne sensor with visible, experimental UV and quantum-well IR cameras capable of tracking targets

that can be detected, identified, and precision-tracked with the ANTE processor.

VIM Vibration Isolation Module.

VINSON Encrypted Ultra High Frequency Communications System.

VIS Visible.

VIS/UV Visible/Ultraviolet.

Visibility Range (or Visibility)

The horizontal distance (in kilometers or miles) at which a large dark object can just be seen against the horizon's sky in daylight. The visibility is related to the clarity of the atmosphere ranging from 170 miles (280 kilometers) for an exceptionally clear atmosphere to 0.6 mile (1.0 kilometer) or less for dense haze or fog. The visibility on an

average clear day is taken to be 12 miles (19 kilometers).

Visible Electro-

Optics

Technologies/techniques employed by optical sensors in the visible portion of the

wavelength spectrum.

VLAR Vertical Launch And Recovery (UAV JPO term).

VLF Very Low Frequency.

VLOS Vertical Line of Sight.

VLS Vertical Launch System.

VLSI Very Large Scale Integration.

VLSI Circuits.

VLWIR Very Long Wavelength Infrared.

VME Versa Modular European [standards].

VMF Variable Message Format (TelComm term).

VOX Voice Actuation.

VRI Vanguard Research, Inc., Fairfax, VA.

VTC 1. Video Teleconference. 2. Video Teleconference Center.

VTOL Vertical Takeoff and Landing [aircraft].

VTOL-UAV Vertical Takeoff and Landing Unmanned Aerial Vehicle.

VUE Visible Light/Ultraviolet Experiment.

Vulcan UK bomber.

VV&A Verification, Validation, and Accreditation.

VVER Pressurized water type nuclear power reactor.

VVIRF Verification and Validation Information Request Form.

w/ With.

w/o Without.

W/TD Warning/Threat Detection.

WAA Wide Aperture Array.

WALEX Warfare Analysis Laboratory Exercise.

WAM 1. Worldwide Military Command and Control System (WWMCCS) ADP Modernization.

2. Wide Area Munition. 3. Wide Area Mine. 4. Wide Area Missile.

WAN Wide Area Network (TelComm/Computer term).

WAP Wide Azimuth Probe.

Wargame A simulation, by whatever means, of a military operation involving two or more

opposing forces, using rules, data, and procedures designed to depict an actual or

assumed real life situation.

Wargame 2000 Title of BMDO program for development of a state-of-the-art simulation tool at the JNTF

for use in CONOPS validation, missile defense program design verification, validation and accreditation, and support of CinC/Allied wargames and assessments. The goal is

for a new tool to replace ARGUS by FY 2000.

Warhead A weapon, usually thermonuclear, contained as the payload of a missile.

Warhead Mating The act of attaching a warhead section to a rocket or missile body, torpedo, airframe,

motor, or guidance section.

Warhead Section A completely assembled warhead including appropriate skin sections and related

components.

WARM See Wartime Reserve Modes.

Warning of Attack A warning to national policymakers that an adversary is not only preparing its armed

forces for war, but intends to launch an attack in the near future.

Warning Order A preliminary notice of an order or action that is to follow.

WARSIM Warfighter Simulation (USA term).

WARSIM 2000 Warfighter Simulation 2000 (USA term).

Wartime Reserve Characteristics and operating procedures of sensor, communications, navigation aids, threat recognition, weapons, and countermeasures systems that (1) will contribute to

military effectiveness if unknown to or misunderstood by opposing commanders before they are used, but (2) could be exploited or neutralized if known in advance. Wartime reserve modes are deliberately held in reserve for wartime or emergency use and

seldom, if ever, applied or intercepted prior to such use.

WAS Wide Area Sensor.

WASHDC Washington, District of Columbia.

Wastage (Max) The maximum number of defense weapons which, when used, will be ineffective in

contributing to the defeat of the offense.

Watch Condition (WATCHCON)

Series of readiness conditions used by the intelligence community to alert staffs to

watchfulness without raising DEFCON.

WATS Wide Area Telephone System.

Wave Time grouping of offensive Reentry Vehicles constrained by launcher inventories.

WAVE Wideband Angular Vibration Experiment.

Wavelength The distance between two points having the same phase in two consecutive cycles of a

periodic wave, along a line in the direction of propagation.

WB Wideband.

WBM Weapons Battle Manager(s).

WBS See Work Breakdown Structure.

WCC 1. See Wing Control Center. 2. Weapons Control Computer.

WCG Workstation Computer Graphics (Computer term).

WCP Weapon Control Processor.

WCP 1. Weapon Control Platform. 2. Weapon Control Processor.

WCS Weapons Control System.

WDM Wavelength Division Multiplexon.

Weapon Enabling The set of control functions without which defense weapons cannot be launched.

Weapon Engagement Zone In air defense, airspace of defined dimensions within which the responsibility normally

rests with a particular weapon system.

Weapon System Control That set of assessment, decision, and direction functions normally implemented automatically to assure that individual weapons are pointed, fired, and guided as necessary to intercept the designated attackers.

Weapon Target Assignment (WTA) The assignment of an interceptor to a particular threat object. In Midcourse, a WTA requires in-flight communication between the Battle Manager and an in-flight interceptor. To ensure the Battle Manager maintains the ephemeris of the interceptor, the WTA will constraint the interceptor's flight error.

Weapons Allocation Designation of a certain weapon to attack a certain threat after Engagement Authorization is given.

Weapons Assignment In air defense, the process by which weapons are assigned to individual air weapons controllers for use in accomplishing an assigned mission. Assignment of a particular interceptor to a particular target.

Weapons Commitment Authorization to allocate certain weapons to designated targets thus permitting checklist actions to be taken.

Weapons Control The varying degree of formal control an area air defense commander exercises over all

air defense weapons in his area of responsibility.

Weapons Enablement Authorization to place a weapon into its most ready state but prior to release.

Weapons Free A weapon control order imposing a status whereby weapons systems may be fired at any

target not positively recognized as friendly.

Weapons Hold A weapon control order imposing a status whereby weapons systems may be fired in

self-defense or in response to a formal order.

Weapons Initiation State when a weapon system is to be placed in the highest state of readiness shy of

weapon allocation. It is possible to go direct to weapons allocation or release without

first initiation or allocation.

Weapons of Mass Destruction (WMD) In arms control usage, weapons that are capable of a high order of destruction and/or of

being used in such a manner as to destroy large numbers of people.

Weapons Readiness State The degree of readiness of air defense weapons which can become airborne or be launched to carry out an assigned task. Weapons readiness states are expressed in

number of weapons and number of minutes.

Weapons Release Authority (WRA) The order that gives weapon controllers the authority to fire. (USSPACECOM)

Weapons System Items that can be used directly by the armed forces to carry out combat missions and

that cost more than \$100,000 or for which the eventual total procurement cost is more than \$10,000,000. That term does not include commercial items sold in substantial

quantities to the general public.

Weapons System Employment Concept A description in broad terms, based on established outline characteristics, of the application of a particular equipment or weapon system within the framework of tactical

concept and future doctrines.

Weapons Tight A weapon control order imposing a status whereby weapons systems may be fired only

at targets recognized as hostile.

Western Test Range (WTR) Beginning at Vandenberg AFB, CA, this range stretches half-way around the globe where it meets the Eastern Test Range. An array of launch complexes, sensors, and tracking sites makes up the Western Test Range. It is operated by the Space and Missile Test Organization (SAMTO), a unit of AFSPACECOM as of 1 October 1990.

WESTPAC Western Pacific.

WEU Western European Union.

WEZ Weapon Engagement Zone.

WFF Wallops Flight Facility, Wallops Island, VA.

WFOV Wide Field of View.

WFX Warfighter Exercise.

WG Working Group.

WGET Working Group on Encryption and Telecommunications.

WH White House.

WHDEVAL Warhead Evaluation.

WILTEL Williams Telecommunications Group Incorporated.

Wing Control Center (WCC) A second Space Wing center that logistically/administratively controls operational

satellite systems operated by them at worldwide locations.

WIPT Working-level Integrated Product (Process) Team.

WIS WWMCCS Information System.

Withhold 1. A term used in a pre-planned response option (PRO) to identify the withholding of

part of the space or ground weapon inventory against detected threat launches, in anticipation of follow-on attacks. 2. (Nuclear) The limiting of authority to employ nuclear weapons by denying their use within specified geographical areas of certain

countries.

WL Wright Laboratory, Wright-Patterson AFB, OH.

WLR Weapons Launch Report.

WMD Weapon(s) of Mass Destruction.

WMF Windows Metafile.

WMP War and Mobilization Plan.

WNINTEL Warning Notice - Intelligence Sources or Methods Involved.

WOC Wing Operations Center (JFACC term).

WON Work Order Number.

Work Breakdown Structure (WBS) 1. A product-oriented family tree division of hardware, software, services, and other work tasks which organizes, defines, and graphically displays the product to be produced, as well as the work to be accomplished to achieve the specified product. 2. A hierarchical

diagram used to depict the tasks, capital, and resources required during the development of a product.

Work Packages Detailed short-span jobs, or material items, identified by the contractor for

accomplishing work required to complete the contract.

World-Wide Military Command and Control System (WWMCCS) The system that provides the means for operational direction and technical administrative support involved in the function of command and control of U.S. military forces. The system comprises: The NMCS - The command and control systems of the unified and specified commands - The WWMCCS-related management/information systems of the headquarters of the Military Departments - The command and control systems of the headquarters of the service component commands - The command and control support systems of DoD agencies. The system furnishes a multi-path channel of secure communications to transmit information from primary sources to those who must make decisions (including the President) and to transmit their decisions (in the form of military orders) to subordinates.

Worldwide Indications Monitoring System (WWIMS) A confederation of national, unified, and specified command and other intelligence centers and facilities. The primary mission of the WWIMS system is to monitor, maintain, and report on Indications and Warning (I&W) activity.

WP 1. Warsaw Pact.

WPAFB Wright-Patterson AFB, Dayton OH.

WPC Warsaw Pact Countries.

WPD Work Package Directive (SDIO term; see PMA).

WPN Weapon Procurement Navy.

WR Western Range.

WR/VAFB Western Range/Vandenburg Air Force Base.

WRA 1. See Weapons Release Authority. 2. Weapon Replaceable Assembly.

WRM War Reserve Materiel.

WRSK War Reserve Spares Kit.

WRTTM Warhead Replacement Tactical Telemetry Module (USAF term).

WS Warning System.

WSE Weapon Support Equipment.

WSEM Weapons System Evaluation Program.

WSESRB Weapons System Explosive Safety Review Board.

WSI 1. Wafer-Scale Integration. 2. War Supporting Industry.

WSM Waterspace Management (USN term).

WSMC Western Space and Missile Center, Vandenberg AFB, CA.

WSMR White Sands Missile Range, NM

WTA 1. Weapon Target Assignment. 2. Weapon Target Assignment (C2 term).

WTO Warsaw Treaty Organization.

WTP 1. Weapon Test Plan. 2. Weapon Task Plan.

WTR Western Test Range.

WUC Work Unit Code (ILS term).

WWABNCP Worldwide Airborne Command Post.

WWG Wideband Waveform Generator.

WWIMS See Worldwide Indications Monitoring System.

WWMCCS See World-Wide Military Command and Control System.

WWW World Wide Web.

WX Weather.

X-ON/X-OFF Transmitter On/Transmitter Off (TelComm/Computer term).

X-Ray Laser (XRL)

A laser that generates a beam or beams of x-rays. Also called an "X-raser."

X-Rays

Electromagnetic radiation of high energy which results from either the release of energy from electrons changing orbits about the nucleus (discrete) or the inelastic collision of charged particles with the electromagnetic field of the nucleus. X-rays have wavelengths shorter than those in the ultraviolet region, e.g., less than 10E-6 cm or 100 Angstroms. Materials at very high temperatures (millions of degrees) emit such radiations; they are then called thermal x-rays. As generally produced by x-ray machines, they are "bremsstrahlung" resulting from the interaction of electron of 1 kiloelectron-volt or more energy with a metallic target. (See Electromagnetic Radiation and Thermal X-Rays.)

XBR X-Band Radar.

XCVR Transceiver.

XDS Exoatmospheric Defense System.

XGA Extended Graphics Array.

XIWT Cross Industry Working Team.

XMTR/CVR Transmitter/Receiver.

XO 1. Executive Officer. 2. Deputy Chief of Staff for Operations (Office Code).

XoDis Exoatmospheric Discrimination.

XOX Assistant Deputy Chief of Staff for Operations (Office Code).

XRL See X-Ray Laser.

XRS USAF/ESC Staff Symbol.

XTB Exoatmospheric Test Bed.

XTV Experimental Test Vehicle.

Xwindows Unix graphics interface.

Yield (or Energy

Yield)

The total effective energy released in a nuclear (or atomic) explosion. It is usually expressed in terms of the equivalent tonnage of TNT required to produce the same energy release in an explosion. The total energy yield is manifested as nuclear radiation, thermal radiation, and shock (and blast) energy, the actual distribution being primarily dependent upon the medium in which the explosion occurs, as well as the type

of weapon and the time after detonation.

Zero Point The location of the center of a burst of a nuclear weapon at the instant of detonation.

The zero point may be in the air or on or beneath the surface of land or water, dependent

upon the type of burst; it is thus to be distinguished from ground zero.

ZIF Zero Insertion Force.

ZULU Time Zone Indicator for Universal Time (Greenwich Mean Time).

Units of Measurement

| A ampere angstrom length | Keyword/Symbol | | ool | Unit Name | Aspect Measured |
|--|----------------|-------------|-----|--------------------------|----------------------------|
| angstrom bit bit bit binary digit 0 or 1 | [| A |] | ampere | electric current |
| bit bit binary digit 0 or 1 | Ī | angstrom | ĺ | angstrom | length |
| bps columb columb clectric charge cal cal cal cal calorie | Ī | _ | j | | binary digit 0 or 1 |
| C] coulomb electric charge I cal] curie radioactivity I cal] calorie energy I cal] calorie per square energy eentimeter centimeter length I cu centimeter volume I dB decibel signal strength I deg degree plane angle I deg legree plane angle I deg/s legree per second plane angle change rate I deg/s/s legree per second plane angle change rate I deg/s/s legree per second plane angle change rate I deg/s/s legree per second plane angle change rate I deg/s/s legree per second plane angle I deg/s/s legree per second plane angle I dey lelectron-volt energy I G gauss magnetic flux density I gray absorbed | [| bps |] | bit per second | |
| [cal/sq cm] calorie calorie per square centimeter [chan] channel frequency path centimeter length cours centimeter length degree plane angle change rate degree plane angle change rate degree plane angle degree prescond plane angle degree prescond plane angle degree prescond plane angle degree prescond diameter | [| |] | coulomb | electric charge |
| [cal/sq cm] calorie energy energy per area centimeter [chan] channel frequency path centimeter channel frequency path centimeter length cours centimeter length cours cubic centimeter volume degree degree plane angle degree plane angle degree plane angle degree plane angle degres degree per second plane angle change rate deg/s/s degree per second plane angle change rate deg/s/s degree per second plane angle change rate deg/s/s degree per second diameter length dyne force delectron-volt dyne force delectron-volt degree degree per second length dyne force delectron-volt degree delectron-volt dele | [| c; Ci |] | curie | |
| Centimeter Cen | [| cal |] | calorie | energy |
| [chan | [| cal/sq cm |] | calorie per square | energy per area |
| [cm] centimeter cubic centimeter cubic centimeter volume [dB] decibel signal strength [deg] degree plane angle [deg | | _ | | centimeter | |
| [dB | [| chan |] | channel | frequency path |
| [deg K] degree plane angle degree plane angle deg K degree plane angle degree plane angle degres degree plane angle degres degree plane angle degres degree per second plane angle change rate deg/s degree per second degre | [| cm |] | centimeter | length |
| [deg K] degree degree, Kelvin temperature degree per second plane angle tomperature plane angle degres per second plane angle change rate slew acceleration per second length diameter length force energy energy absorbed dose lectron-volt energy energy absorbed dose length l | [| cu cm |] | cubic centimeter | volume |
| [deg/K] degree, Kelvin temperature plane angle change rate degree per second per second [deg/s/s] degree per second slew acceleration [deg/s/s] degree per second per second [diam] diameter length | [| dB |] | decibel | signal strength |
| [deg/s/s] degree per second degree per second degree per second slew acceleration [diam | [| deg |] | degree | plane angle |
| [deg/s/s] degree per second slew acceleration per second degree per second slew acceleration per second [diam] diameter length force [dyn] dyne force [eV] electron-volt energy magnetic flux density [g] 1) 9.808 meters per second per second; 2) gram tion constant; 2) mass frequency [GV] gray absorbed dose [h] hour time [Hz] hertz frequency energy [J] joule energy [Kelvin temperature change [kb] kilobit per second velocity (binary digit) energy [kl/sq m] kilopara per square meter [kJ] kilobetz energy [kJ/sq cm] kilopiule energy [kJ/sq cm] kilopiule energy [kl/sq cm] kilometer energy [kl/sq m] kilometer [kw] kilowatt per second velocity (binary digit) energy gram [kV/sq cm] kilowatt per kilogram specific power kylower specific power [kW/sq cm] kilowatt per kilogram square energy specific power [kW/sq cm] kilowatt per kilogram square energy specific power [kW/sq cm] kilowatt per square energy flux | [| deg K |] | degree, Kelvin | temperature |
| [diam] diameter length diameter length diameter length dyn dyn dyn force leeV lelectron-volt energy magnetic flux density magnetic frequency magnetic flux density mag | [| deg/s |] | degree per second | plane angle change rate |
| [diam] diameter length force force eV electron-volt energy gauss magnetic flux density 1) 9.808 meters per second per second; 2) gram tion constant; 2) mass frequency frequency gigahertz frequency time frequency frequency | [| deg/s/s |] | degree per second | slew acceleration |
| [dyn | | | | per second | |
| [eV] gauss magnetic flux density [g] 1) 9.808 meters per second per second; 2) gram tion constant; 2) mass [GHz] gigahertz frequency [Gy] gray absorbed dose [h] hour time [Hz] hertz frequency [J] joule energy [J-T] Joule -Thomson temperature change [kA] kiloampere electric current [kb] kilobit binary digit [kb/s] kilobit binary digit [kg/sq m] kilogram per square meter [KHz] kilohertz frequency [kJ/kg] kilojoule energy [kJ/kg] kilojoule energy [kilojoule per kilogram [km] kilometer length [km] kilometer length [km/s] kilometer per second velocity [kV] kilometer length [kV] kilometer length [kV] kilometer length [kV] kilometer per second [kV] kilowatt per kilogram [kW/kg] kilowatt per kilogram [kW/kg] kilowatt per kilogram [kW/kq cm] kilowatt per kilogram [kW/kq cm] kilowatt per meter thermal transport [kW/kq cm] kilowatt per square [kW/m] kilowatt per meter [kW/m] kilowatt per meter thermal transport [kW/kq cm] kilowatt per square [cenergy flux | [| diam |] | diameter | length |
| [G] gauss magnetic flux density [g] 1) 9.808 meters per second per second; 2) gram tion constant; 2) mass frequency [GHz] gigahertz frequency [Gy] gray absorbed dose [h] hour time [Hz] hertz frequency [J] joule energy [J-T] Joule -Thomson temperature change [K] Kelvin temperature [kA] kiloampere electric current [kb] kilobit binary digit [kb/s] kilobit per second velocity (binary digit) [kg/sq m] kilogram per square meter [KHz] kilojoule energy [kJ/kg] kilojoule per kilogram [kJ/sq cm] kilojoule per square laser lethality [km/s] kilometer length [km/s] kilometer length [kW/kg] kilovatt per selond velocity [kW/kg] kilowatt per kilogram [kW/kq cm] kilowatt per meter thermal transport [kW/m] kilowatt per meter [kW/kq cm] kilowatt per meter [kW/m] kilowatt per meter [kW/m] kilowatt per meter [kW/m] kilowatt per meter | [| dyn |] | dyne | force |
| [| [| eV |] | electron-volt | energy |
| ond per second; 2) gram frequency gigahertz frequency absorbed dose frequency absorbed dose frequency absorbed dose frequency | [| G |] | C | magnetic flux density |
| [GHz] gigaĥertz frequency [Gy] gray absorbed dose [h] hour time [Hz] hertz frequency [J] joule energy [J-T] Joule -Thomson temperature change [K] Kelvin temperature [kA] kiloampere electric current [kb] kilobit binary digit [kb/s] kilobit per second velocity (binary digit) [KeV] kiloelectron-volt energy [kg/sq m] kilogram per square pressure [KHz] kilohertz frequency [kJ/kg] kilojoule energy [kJ/kg] kilojoule energy [kJ/kg] kilojoule per kilogram [kJ/sq cm] kilometer length [km] kilometer length [km/s] kilometer electromotive force [kW] kilovolt electromotive force [kW] kilowatt per kilogram [kW/kg] kilowatt per kilogram [kW/m] kilowatt per meter thermal transport [kW/m] kilowatt per meter thermal transport [kW/kg cm] kilowatt per meter thermal transport | [| g |] | 1) 9.808 meters per sec- | 1) gravitational accelera- |
| [Gy | | | | | |
| [h hour time [Hz] hour frequency frequency energy [J] joule energy energy [J-T] Joule - Thomson temperature change temperature [K] Kelvin temperature [kA] kiloampere electric current binary digit binary digit binary digit binary digit [kb/s] kilobit binary digit binary digit [kb/s] kilobit per second velocity (binary digit) [KeV] kiloelectron-volt energy [kg/sq m] kilogram per square pressure meter [KHz] kilohertz frequency [kJ/kg] kilojoule energy [kJ/kg] kilojoule energy gram [kJ/sq cm] kilojoule per kilospecific energy gram [kJ/sq cm] kilometer length velocity [kM] kilometer length velocity [KT] kiloton yield [kW/s] kilovolt electromotive force [kW] kilowatt per kilogram specific power Keyword/Symbol Unit Name Aspect Measured [kW/m] kilowatt per meter thermal transport energy flux | [| GHz |] | gigahertz | |
| [Hz] hertz frequency [J] joule energy [I J-T] Joule -Thomson temperature change [K] Kelvin temperature [kA] kiloampere electric current [kb] kilobit binary digit [kb/s] kilobit per second velocity (binary digit) [KeV] kiloelectron-volt energy [kg/sq m] kilogram per square meter [KHz] kilohertz frequency [kJ] kilojoule energy [kJ/kg] kilojoule energy [kJ/kg] kilojoule per kilospeam [kJ/sq cm] kilometer length [km/s] kilometer length [km/s] kilometer length [kT] kiloton yield [kV] kilovolt electromotive force [kW] kilowatt per kilogram [kW/kg] kilowatt per kilogram [kW/kg] kilowatt per kilogram [kW/m] kilowatt per meter thermal transport [kW/m] kilowatt per square | [| Gy |] | gray | absorbed dose |
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| [J-T] Joule -Thomson temperature change [K] Kelvin temperature [kA] kiloampere electric current [kb] kilobit binary digit [kb/s] kilobit per second velocity (binary digit) [KeV] kiloelectron-volt energy [kg/sq m] kilogram per square meter [KHz] kilohertz frequency [kJ] kilojoule energy [kJ/kg] kilojoule per kilogram [kJ/sq cm] kilojoule per square laser lethality centimeter [km] kilometer length [km/s] kilometer per second velocity [KT] kiloton yield [kV] kilovolt electromotive force [kW] kilowatt per kilogram specific power [kW/kg] kilowatt per kilogram specific power [kW/kg] kilowatt per kilogram specific power [kW/m] kilowatt per meter thermal transport [kW/m] kilowatt per meter thermal transport [kW/sq cm] kilowatt per square | [| Hz |] | hertz | frequency |
| [K] Kelvin temperature [kA] kiloampere electric current [kb] kilobit binary digit [kb/s] kilobit per second velocity (binary digit) [keV] kiloelectron-volt energy [kg/sq m] kilogram per square pressure [kJ/sq m] kilojoule energy [kJ/kg] kilojoule per kilo- gram specific energy [kJ/sq cm] kilojoule per square laser lethality [km] kilometer length [km/s] kilometer per second velocity [km/s] kilometer per second velocity [kT] kiloton yield [kV] kilovolt electromotive force [kW] kilowatt power [kW/kg] kilowatt per kilogram specific power Keyword/Symbol Unit Name Aspect Measured [kW/m] kilowatt per meter thermal transport [kW/sq cm] kilowatt per square energy flux | [| |] | joule | |
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| kb kilobit binary digit kk/s kilobit per second velocity (binary digit) keV kiloelectron-volt energy energy kilogram per square pressure meter ky/sq m kilopoule energy energy kilojoule energy kilojoule energy kilojoule energy kilojoule energy energy kilojoule energy en | [| K |] | | |
| [kb/s] kilobit per second velocity (binary digit) [KeV] kiloelectron-volt energy [kg/sq m] kilogram per square pressure [KHz] kilohertz frequency [kJ] kilojoule energy [kJ/kg] kilojoule per kilo- specific energy gram gram laser lethality [kJ/sq cm] kilojoule per square laser lethality centimeter length [km/s] kilometer per second velocity [km/s] kiloton yield [kV] kilovolt electromotive force [kW] kilowatt power [kW/kg] kilowatt per kilogram specific power Keyword/Symbol Unit Name Aspect Measured [kW/m] kilowatt per meter thermal transport [kW/m] kilowatt per meter thermal transport [kW/sq cm] kilowatt per square energy flux | [| |] | | |
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| meter [KHz] kilohertz frequency [kJ] kilojoule energy [kJ/kg] kilojoule per kilo- gram [kJ/sq cm] kilojoule per square [km] kilometer [km/s] kilometer length [km/s] kilometer per second velocity [KT] kiloton yield [kV] kilovolt electromotive force [kW] kilowatt per kilogram specific power [kW/kg] kilowatt per kilogram specific power Keyword/Symbol Unit Name Aspect Measured [kW/m] kilowatt per meter [kW/sq cm] kilowatt per square energy flux | [| | | | |
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| [kW/m] kilowatt per meter thermal transport energy flux | [| - |] | | |
| [kW/sq cm] kilowatt per square energy flux | Ke | eyword/Symb | 001 | Unit Name | Aspect Measured |
| [kW/sq cm] kilowatt per square energy flux | [| kW/m |] | kilowatt per meter | thermal transport |
| | [| kW/sq cm |] | | |
| | | | | centimeter | |

| Г | m | 1 | meter | length |
|--------|------------|--------|---------------------------------|---------------------------------------|
| į | Mbps | ĺ | megabit per second | bit transfer rate |
| Ì | MeV | ĺ | megaelectron-volt | energy |
| Ì | MFLOPS | j | million floating point | processing performance |
| L | 1.11 201 5 | , | operations per second | processing performance |
| ſ | MHz | 1 | megahertz | frequency |
| Ĺ | micro | j j | micro | a one-millionth part |
| L L | micron |] | micrometer | length |
| L f | milli | j j | milli | a one-thousandth part |
| L | min | J 1 | minute | time |
| L | |] j | million instructions | |
| L | mips | 1 | per second | processing speed |
| [| MJ |] | megajoule | energy |
| [| mm |] | millimeter | length |
| ſ | mops | 1 | million operations | processing performance |
| | • | | per second | |
| [| mrad | 1 | milliradian | plane angle |
| Ī | m/s | ī | meter per second | velocity |
| Ì | ms | ĺ | millisecond | time |
| Ì | MT | ĺ | megaton | yield |
| Ì | MV/m | i | megavolt per meter | electric field strength |
| į | MW | ĺ | megawatt | power |
| į | MW/sr | ĺ | megawatt per steradian | laser brightness |
| Ì | N-s | ĺ | newton-second | force |
| Ì | ns | i | nanosecond | frequency |
| ř | parsec | i | parsec | astronomical distance |
| ř | Pa-s | j | pascal-second | pressure |
| Ĺ | R |] | roentgen | radiation dose |
| Ĺ | RAD |] | rad | absorbed dose |
| Ĺ | radian |] | radian | plane angle |
| L L | rad/s |] | radian per second | angular drift |
| L L | ratio |]] | percentage | efficiency |
| L f | | j j | rem | ionizing radiation |
| L T | rem s | J 1 | second | time |
| L T | | J 1 | square meter | area |
| L r | sq m | J 1 | • | |
| L r | sq m/yr | J 1 | square meter per year steradian | area per time absorbed radiation dose |
| L | Sr |] | microradian | |
| L | mrad | J | | plane angle |
| Ĺ | V |] | volt | electromotive force |
| Ĺ | W |] | watt | power |
| Ĺ | W/kg |] | watt per kilogram | specific power |
| [| W/sq cm | J | watt per square centimeter | heat flux |
| [| W/sq m |] | watt per square meter | energy flux |
| j | W/sr | j | watt per steradian | radiant intensity |
| Ì | W/sr sq m | Ī | watt per steradian | radiance |
| L | . 1 | - | square meter | |
| [| yr |] | year | time |
| | | | | |