GLOSSARY

A

ABORT:	Stopping a missile countdown sequence.
AEC:	Atomic energy commission.
AEROSPACE GROUND EQUIPMENT (AGE):	The equipment other than operational which is required to inspect, test, adjust, calibrate, appraise, gage, measure, repair, overhaul, assemble, disassemble, transport, record, store, actuate, or otherwise maintain the operating status of the airborne vehicle AOE, and guidance station equipment.
AEROSPACE OPERATING EQUIPMENT (AOE):	The ground equipment which is the functional part of the weapon system of support system and which operates with the missile in the performance of the latter's mission as a major operational element of the weapon system or support system.
AFC:	Automatic frequency control.
AFM:	Air Force manual.
AFSC:	Air Force specialty code.
AIRFRAME:	The assembled structural and aerodynamic components of a missile which support the various systems and subsystems.
ALERT STATUS MONITORING:	A monitoring condition from which a launch countdown can be initiated immediately.
AME-COTAR:	Angle measuring equipment-correlation tracking and ranging.
APS:	Airborne power supply.
ARMING:	Process of changing a fuze or warhead from a safe condition to a state of readiness for initiation.
ATTITUDE:	The position of an airborne missile about its pitch, roll, and yaw axes to some frame of reference.
ATPA:	Auxiliary turbine pump assembly.
AZIMUTH:	A direction expressed as a horizontal angle measured clockwise from north.

B

BACKOUT:	Performing procedures to return the missile and associated AGE to a safe condition.

BEACON SIGNAL:	An RF pulse on which directional receiving antennas are locked.
BI-APS:	Battery inverter-accessory power supply.
BLANKET:	A term used to denote the use of low pressure gaseous nitrogen in propellant lines and tanks to replace air or gox.
BLAP:	Blast lock alarm panel.
BMAT:	Ballistic missile analyst technician.
BOI:	Break of inspection.
BOIL-OFF:	The vaporization of any volatile liquid.
BUDDY SYSTEM:	A system by which at least two men are together at all times when in designated areas that require the system.

C

CASSEGRAINIAN REFLECTOR (MODIFIED):	A parabolic reflector that reflects RF energy to receiving horns. The horns are in the focal point of the reflector and direct the RF energy through the center of the reflector.
CCAP:	Control center alarm panel.
CCC:	Control center circuits.
CDF:	Combat defense force.
CHECKOUT:	The test procedure that determines the capability of a device to perform a desired operation or function.
CO_2:	Carbon dioxide.
COMBINED SYSTEM EXERCISE (CSE):	A countdown used for crew training and weapon system checkout.
COMBUSTION CHAMBER:	The area where the burning of the fuel/oxidizer mixture occurs in any internal combustion engine. In rocket engines, the combustion chamber is the enclosed area between the injector face and an imaginary plane across the throat of the nozzle.
COMMAND DESTRUCT SIGNAL:	Radio signal used to initiate the destruction device carried in the missile.
COMMUTATION:	A time-sequenced sampling of instrumentation data for transmission on one telemetering channel to a receiving station.

CORRELATION TRACKING AND RANGING (COTAR):	A system that determines missile position by phase comparison of an RF signal received by two or more separate antennas.
COUNTDOWN:	The step-by-step procedure performed prior to missile launching in accordance with a predesignated schedule and measured in terms of T-time.
CP:	Command post.
CSO:	Control system officer.
CST:	Control system technician.
CWT:	Counterweight.

D

DEFCON:	Defense condition.
DELUGE:	A method of cooling a flame deflector with water to prevent damage from a rocket blast.
DIAPHRAGM, BURST:	A dividing wall in a pipe or tube designed to burst at a given pressure.
DIGITAL COMPUTER:	A calculating machine that solves complex problems relating to the missile flight path and presents the result in digits of the decimal system.
DUAL PROPELLANT LOADING (DPL):	A countdown in which fuel and oxidizer are loaded.

E

ECS:	Engine control system.
EPPT:	Electrical power production technician.
ERROR SIGNAL:	In servo mechanisms, a signal voltage applied to a control circuit.
ES:	Electrical system.
ETAP:	Equipment terminal alarm panel.
EWO:	Emergency war order.
EXERCISE MODE:	Mode of operation of the weapon system used to verify the weapon system operation without launching the missile and for training purposes. In the exercise mode, missile fuel tanks are empty and the operation and activation of certain missile system functions are simulated.

F

FAIL-SAFE: A control for the automatic selection of an alternative action in case of malfunction.

FCS: Flight control system.

FCV: Flow control valve.

FDBVAP: Fuel discharge bleed valve.

FTAP: Fuel terminal alarm panel.

FUEL: In a rocket engine, any matter that is mixed with an oxidizer to maintain combustion.

FUZE: A device for initiating a detonation.

G

GAS GENERATOR: The component of a rocket engine which provides hot pressurized gas products for driving the turbine of a turbopump assembly.

GEO: Guidance electronics officer.

GGIGN: Gas generator igniter.

GGS: Ground guidance station.

GGVFBV: Gas generator valve fuel bleed valve.

GGVPV: Gas generator valve pilot valve.

GIMBAL: A device consisting of a pair of rings pivoted on axis that are at right angles to each other so that one is free to swing within the other.

GMTS: Guided missile test set.

GN_2: Gaseous nitrogen.

GO STATUS SIGNAL: A signal signifying that a system is in operating condition and ready to perform its particular function.

GYRO: An electromechanical device whose qualities to maintain rigidity in space and precision are used to furnish steering commands and to stabilize the guidance platform.

H

HARDENED CONDITION: The hardened condition of a building or structure when it is protected against overpressure.

HEAT EXCHANGER:	A device which transfers heat from one fluid or substance to another.
HF:	High frequency.
HOLD:	A condition initiated during a launch countdown wherein the countdown is interrupted and is not allowed to proceed until the condition is resolved.
HPS:	Hydraulic power supply.
HR:	Hour.
H_2SO_4:	Sulphuric acid.

I

ICC:	Instrumentation control center.
IGNITER:	A pyrogenic device to initiate burning of the fuel mixture in the combustion chamber.
IMLO:	Instructor missile launch officer.
INITIATOR:	An electrical device used to detonate primacord.
INJECTOR:	A device through which the fuel and oxidizer are sprayed into the combustion chamber.
IRSS:	Instrumentation range and safety system.
INSTRUMENTATION:	All equipment that senses, transmits, processes, indicates, or records the performance of components and systems during missile captive or flight tests.

K

KOH	Potassium hydroxide.

L

LAUNCH COMPLEX	The area encompassing the launch stands, guidance stations, and control centers.
LAUNCHER:	Structural device designed to physically support and hold missile in position for firing.
LAUNCHER SITE:	A launcher site consists of a missile silo, equipment terminal, a propellant terminal, and related equipment.
LCC:	Launch control console.

LCFC:	Launch complex facilities console.
LCS:	Launch control system.
LES:	Launch enable system.
LONGERON:	Lengthwise structural member.
LN_2:	Liquid nitrogen.
LS:	Launch sequencer.

M

MAET:	Missile accident emergency team.
MCC:	Missile combat crew.
MCCC:	Missile combat crew commander.
MFSO:	Missile flight safety officer.
MGC:	Missile guidance console.
MGS:	Missile guidance set.
MLO:	Missile launch officer.
MMT:	Missile maintenance technician.
MODULATION:	The result of varying some characteristic of a wave in accordance with another wave. In radio communications, carrier wave is varied to convey intelligence. The intelligence is called the modulating signal and the modulated carrier is called the modulated waved
MSAP:	Missile silo alarm panel.

N

N/A:	Not applicable.
NAOH:	Sodium hydroxide.
NAUTICAL MILE:	A distance equal to 6076.1033 feet.

O

O&C:	Operations and checkout console.
OSBVAP:	ATPA oxidizer pump suction line bleed valve.
OSBVPV:	Oxidizer suction bleed valve pilot valve.

OXIDIZER:	A substance such as liquid oxygen which supports combustion when combined with fuel.

P

PACKAGE:	A complete unit made up of sub-units.
PITCH:	The angular displacement about the lateral axis of an airframe.
PLPS:	Propellant loading and pressurization system.
PMR:	Pacific missile range.
POWER PACK:	An electric motor driven hydraulic power unit used to provide hydraulic power for operation of the missile launcher.
PRIMACORD:	The explosive cord that ruptures the propellant tanks upon receipt of a command destruct signal.
PROPELLANT:	The fuel and/or oxidizer used in a propulsion system.
PTAP:	Propellant terminal alarm panel.
PURGE:	The act of removing gaseous oxygen from lox loading lines and missile lox tanks, and replacing with gaseous nitrogen.
PUSHBUTTON:	A device that closes an electrical circuit when pressed and opens the circuit when released or pressed a second time.

R

RECYCLE:	Performing procedures to return the missile and associated AGE to alert status monitoring.
RGS:	GMTS plus MGS.
R-0:	Missile state of readiness preparatory to launch wherein all system checks have been completed, fuel has been loaded, and the weapon system is ready to begin the terminal countdown.
ROLL:	The angular displacement of an airframe about its longitudinal axis.
RP-1:	Rocket propellant (fuel).
RPIE:	Real property installed equipment.
R/V:	Re-entry vehicle.

RVS: Re-entry vehicle system.

S

SAC CEM: Strategic Air Command civil engineering manual.

SACM: Strategic Air Command manual.

SAC SUP: Strategic Air Command supplement.

SECE: Supplemental engine control equipment.

SERVOAMPLIFIER: An electronic device which converts and amplifies an electrical input signal to direct current for actuating electrohydraulic servovalves.

SERVOVALVE: Electrohydraulic valve which acts in response to electrical control signals.

SHUTDOWN: The act of terminating the launch countdown prior to lift off, usually because of a malfunction. Shutdowns are automatically initiated by system or component malfunction or manually initiated by means of a pushbutton on the LCC.

SKA-PAKS: Portable oxygen packages to be used in emergencies.

SM: Strategic missile.

A condition of a missile or facility when openly exposed to overpressure, heat, radiation, penetration, or other effects of enemy attack.

STAGING: The transition from booster phase to sustainer phase.

STAGING ROCKET: The auxiliary solid propellant units attached to Stage II of the misssle to assist in stage separation.

SQUIB: Small explosive device used to activate batteries.

T

TCIGN: Thrust chamber igniter.

TCTO: Time compliance technical order.

TCS: Targeting control system.

TDB: Time display board.

T/M: Telemetering.

TMCO: Target material control officer.

TOPPING: An act accomplished near the completion of the launch countdown wherein the missile lox tanks receive an additional amount of sub-cooled liquid oxygen to replace lox which has boiled off following lox loading.

TPA: Turbine pump assembly.

TPAXV: TPA starter valve.

TRAJECTORY: The path of the missile from launch to impact.

TRANSDUCER: A data gathering sensing device that gathers and converts physical variations into corresponding voltages.

TSI: Time sequence 1.

U

UMBILICAL CABLE: A cable with a quick disconnect plug through which missile equipment is powered, controlled, and checked out while the missile is still attached to the launching equipment.

UMBILICAL TOWER: A steel structure that supports servicing lines and cables that must remain attached to the missile when it is raised out of the silo.

V

VIP: Very important person.

W

WARHEAD: The portion of the missile intended to be lethal or incapacitating; normally includes the warhead casing with an explosive, chemical, or incendiary agent.

Y

YAW: An angular displacement from the vertical axis of a missile. Looking forward, a positive yaw is clockwise.