

## **Acronyms and Abbreviations**

$\Delta v$	delta-v
$\omega$	argument of perigee
$\Omega$	ascending node
2 SOPS	2nd Space Operations Squadron
3 SOPS	3rd Space Operations Squadron
4 SOPS	4th Space Operations Squadron
6 SOPS	6th Space Operations Squadron

### **A**

a	semimajor axis
AA	attack assessment
AADC	area air defense commander
AB	air base
ABM	antiballistic missile
ACC	Air Combat Command
ACCE	air component coordination element
ACS	attitude control subsystem
ACSC	Air Command and Staff College
ADEOS	Advanced Earth Observation Satellite
ADRG	Arch Digitized Raster Graphics
ADSI	Air Defense Systems Integrator
AEHF	Advanced Extremely High Frequency
AEOS	Advanced Electro-Optical System
AEOS-L	Advanced Electro-Optical System long-wave infrared
AEP	architecture evolution plan
AEPDS	Advanced Electronic Processing and Dissemination System
AETF	air and space expeditionary task force
AFB	Air Force Base
AFCC	Air Force Communications Command
AFDD	Air Force doctrine document
AFGSC	Air Force Global Strike Command
AFM	Air Force manual
AFQTP	Air Force qualification training package
AFRL	Air Force Research Laboratory
AFS	Air Force station
AFSATCOM	Air Force satellite communications
AFSCN	Air Force Satellite Control Network
AFSOC	Air Force Special Operations Command
AFSPC	Air Force Space Command
AFSPC/CC	commander, Air Force Space Command
AFSPCPAM	Air Force Space Command pamphlet
AFSSS	Air Force Space Surveillance System
AFSST	Air Force space support team
AFTTP	Air Force tactics, techniques, and procedures

ACRONYMS AND ABBREVIATIONS

AFWA	Air Force Weather Agency
AIRS	Advanced Inertial Reference Sphere
Al	aluminum
ALCM	air-launched cruise missile
ALCOR	ARPA Lincoln C-Band Observable Radar
ALERT	attack and launch early reporting to theater
ALTAIR	ARPA Long-Range Tracking and Identification Radar
AMCS	alternate master control station
AMOS	Affordable Modular Optimized Satellite; Army Research Projects Agency (ARPA) Maui Optical Site
AMSU	advanced microwave sounding unit
AMWC	Alternate Missile Warning Center
AO	area of operations
AOC	air operations center (JP 1-02); air and space operations center (USAF); auxiliary output chip
AOI	area of interest
AOR	area of responsibility
APStar	Asia Pacific Telecommunications Satellite Company
APT	automatic picture transmission
ARFOR	Army forces
ARNS	aeronautical radio navigation service
ARPA	Advanced Research Projects Agency
ARSPACE	Army Space Command
ARSST	Army space support team
ARSTRAT	Army Strategic Command
ARTS	automated remote tracking station
A-S	antispoofing
ASARS-2	Advanced Synthetic Aperture Radar System-2
ASAT	antisatellite
ASCC	Alternate Space Control Center; Army service component command
ASCO	Arab Satellite Communications Organization
ASEDP	Army Space Exploitation Demonstration Program
AsiaSat	Asia Satellite Telecommunications Company
ASIS	Army Space Initiatives Study
ASPADOC	alternate space defense operations center
ASPO	Army Space Program Office
ATACMS	Army Tactical Missile System
ATO	air tasking order
ATV	automated transfer vehicle
AU	distance of Earth from the sun
AUST-T	Advanced Universal System Test Terminal
AUTONAV	autonomous navigation
AVHRR	advanced very high resolution radiometer
AWACS	Airborne Warning and Control System
AWC	Air War College
AWN	Automated Weather Network
AZA	auroral zone absorption

**B**

BDA	battle damage assessment
BIOT	British Indian Ocean Territory
BMD	ballistic missile defense
BMEWS	Ballistic Missile Early Warning System
BOA	battlefield ordnance awareness
BOC	binary offset carrier
bps	bits per second
BPSK	binary phase-shift keying
BSAT	Broadcasting Satellite System

**C**

c	linear eccentricity
C2	command and control
C3	command, control, and communications
C4	command, control, communications, and computers
C4I	command, control, communications, computers, and intelligence
C/A	course acquisition
CACS	command and control squadron
CALCM	conventional air-launched cruise missile
CANR	Canadian NORAD Region
CAOC	combined air operations center
CAP	Civil Air Patrol
CAV	common aero vehicle
CBERS	China-Brazil Earth Resources Satellite
CCD	camouflage, concealment, and deception
CCDR	combatant commander
CCIS	civil/commercial imagery system
CCS	constellation control station; Counter Communications System
CDF	commercial demonstration flight
CDR JFCC Space	commander, Joint Functional Component Command for Space
CDRUSSTRATCOM	commander, US Strategic Command
CEP	circular error probability
CERES	Central European Regional Satellite
CFACC	combined force air component commander (JP 1-02); combined force air and space component commander (USAF)
CGGE	CONUS Ground Gateway Element
CGS	CONUS ground station
ChinaSat	China Broadcast and Communications Satellite Corporation
CIA	Central Intelligence Agency
CIC	Combat Intelligence Correlator; Combined Intelligence Center

ACRONYMS AND ABBREVIATIONS

CINC	commander in chief
CIO	Central Imagery Office
CIR	color infrared
CIRA	Cospar International Reference Atmosphere
CJCS	chairman of the Joint Chiefs of Staff
CM	cruise missile
CMAS	Cheyenne Mountain Air Station
CME	coronal mass ejection
CMOC	Cheyenne Mountain Operations Center
CMR	Communication by Moon Relay
cm/s	centimeters per second
CNA	computer network attack
CND	computer network defense
CNES	Centre National d'Etudes Spatiales
CNO	chief of naval operations
CO <sub>2</sub>	carbon dioxide
COA	course of action
COCOM	combatant command
COF	Columbus Orbital Facility
COMAFFOR	commander, Air Force forces
COMINT	communications intelligence
COMSATCOM	commercial satellite communications
CONOPS	concept of operations
CONUS	continental United States
COTS	commercial off-the-shelf
CPB	charged particle beam
CRT	cathode ray tube
CSA	Canadian Space Agency
CSEL	combat survivor evader locator
CSIL	Commercial Satellite Imagery Library
CSPE	communications systems planning element

**D**

D	distance
DAGR	Defense Advanced Global Positioning System (GPS) Receiver
DAMA	demand assigned multiple access
DARO	Defense Airborne Reconnaissance Office
DARPA	Defense Advanced Research Projects Agency
dB	decibel
dBW	decibel watt
DC	direct current
DCSOPS	Deputy Chief of Staff for Operations and Plans, US Army
DDC	data distribution center
DEFSMAC	Defense Special Missile and Aerospace Center
DEM	digital elevation model
DEW	distant early warning
DF	direction finding; Dong Feng

DGPS	differential global positioning system
DIA	Defense Intelligence Agency
DIOCC	Defense Intelligence Operations Coordination Center
DIRSPACEFOR	director of space forces (USAF)
DISA	Defense Information Systems Agency
DISN	Defense Information Systems Network
DMA	Defense Mapping Agency
DMS	defense message system
DMSP	Defense Meteorological Satellite Program
DOD	Department of Defense
DODI	Department of Defense instruction
DOMSAT	domestic communications satellite
DON	Department of the Navy
DOP	dilution of precision
DR	detection radar
DRC	data reduction center
DSC	defensive space control
DSCS	Defense Satellite Communications System
DSN	Defense Switched Network
DSP	Defense Satellite Program; Defense Support Program
DSTS	deep space tracking system
DTED	digital terrain elevation data
DTRA	Defense Threat Reduction Agency
DTS	Diplomatic Telecommunications Service
DWSW	Deployable Weather Satellite Workstation

**E**

e	eccentricity
EA	electronic attack
EAC	echelons above corps (Army)
EAM	emergency action message
EC	Earth coverage
ECI	Earth-centered inertial
EDGE	exploitation of differential GPS (DGPS) for guidance enhancement
EELV	evolved expendable launch vehicle
EGS	European ground station
EHF	extremely high frequency
EIRP	effective isotropic radiated power
ELINT	electronic intelligence
ELSET	element set
EM	electromagnetic
EMD	engineering and manufacturing development
EMP	electromagnetic pulse
EMSS	Enhanced Mobile Satellite Services
ENEC	extendable nozzle exit cone
EORSAT	Electronic Intelligence (ELINT) Ocean Reconnaissance Satellite
EOS	earth observing system

ACRONYMS AND ABBREVIATIONS

EOSAT	earth observation satellite
EPDS	Electronic Processing and Dissemination System
ER	Eastern Range; extended range
ERS	European remote sensing
ERTS	Earth Resources Technology Satellite
ESA	European Space Agency
ESSA	Environmental Science Service Administration
ET	external tank; extraterrestrial
ETM+	enhanced thematic mapper plus
ETRAC	enhanced tactical radar correlator
ETUT	enhanced tactical user terminal
EUMETSAT	European Organization for the Exploitation of Meteorological Satellites
EUTELSAT	European Telecommunications Satellite Organization
EUV	extreme ultraviolet
EVA	extravehicular activity

**F**

F	Fahrenheit
FAA	Federal Aviation Administration
FAB-T	Family of Advanced Beyond Line-of-Sight Terminals
FALCON	Force Application and Launch from CONUS
FAST	forward area support terminal
FBM	fleet ballistic missile
FDMA	frequency division multiple access
FEC	forward error correction
FEP	Fleet Satellite (FLTSAT) Extremely High Frequency (EHF) Package
FH	frequency-hopped
FISINT	foreign instrumentation signals intelligence
FLTFORCOM	Fleet Forces Command
FLTSAT	fleet satellite
FLTSATCOM	fleet satellite communications
FM	field manual (Army)
FNMOC	Fleet Numerical Meteorological and Oceanographic Center
FOSIC	Fleet Ocean Surveillance Information Center
FOV	field of view
FSSC	Fleet Surveillance Support Command
FSST	forward space support to theater
FSU	former Soviet Union
FSW	Fanhuishi Shiyuan Weixing
ft.	foot
FY	Feng Yun

**G**

G2	intelligence (staff division)
G3	operations and plans (staff division)

G6	communications (staff division)
GAO	General Accounting Office
GATS	GPS-Aided Targeting System
Gbps	gigabits per second
GBS	Global Broadcast Service
GCC	geographic combatant commander
GCCS	Global Command and Control System
GCN	ground communications network
GCNU	ground communications network upgrade
GCSS	Global Combat Support System
GDA	gimbaled dish antenna
GDOP	geometric dilution of precision
GEM	graphite-epoxy motor
GEO	geosynchronous Earth orbit
GEODSS	Ground-Based Electro-Optical Deep Space Surveillance
GEOSAT	Geodetic/Geophysical Satellite
GHz	gigahertz
GIANT	Global Positioning System (GPS) Interference and Navigation Tool
GIG	Global Information Grid
GLONASS	Globalnaya Navigatsionnaya Sputnikovaya Sistema
GMF	ground mobile forces
GMS	geostationary meteorological satellite
GOES	geostationary operational environmental satellite
GOTS	government off-the-shelf
GPS	global positioning system
GPS MCS	Global Positioning System (GPS) Master Control Station
GPS/NDS	Global Positioning System (GPS) Nuclear Detection System
GPSOC	GPS Operations Center
GRAB	Galactic Radiation and Background
GSD	ground sampling distance
GSSC	Global SATCOM Support Center
GSU	geographically separated unit
GTO	geosynchronous transfer orbit

## H

H <sub>2</sub> O	hydrogen dioxide (water)
HAARP	High-Frequency Active Auroral Research Program
HAE	height above ellipsoid
HAPS	hydrazine auxiliary propulsion system
HAX	Haystack Auxiliary
H-bomb	hydrogen bomb
HDOP	horizontal dilution of precision
HELSTF	High-Energy Laser System Test Facility
HEMP	high-altitude electromagnetic pulse
HEO	highly elliptical orbit
HF	high frequency

ACRONYMS AND ABBREVIATIONS

HPM	high-power microwave
HQ	headquarters
HRPT	high-resolution picture transmission
HRV	high-resolution visible
HSD	high-speed data
HSI	hyperspectral imagery
HSMP	high-speed message processor
HSS	high-speed stream
HST	Hubble Space Telescope
HUMINT	human intelligence
Hz	hertz

**I**

i	inclination
IBS-I	Integrated Broadcast Service-Interactive
IBS-S	Integrated Broadcast Service-Simplex
ICADS	Integrated Correlation and Display System
ICBM	intercontinental ballistic missile
ICDB	integrated communications database
ICRF	International Celestial Reference Frame
IDCSP	Initial Defense Communications Satellite Program
IFOV	instantaneous field of view
IG	intelligence group
IGMDP	integrated guided missile development program
IGY	International Geophysical Year
IMF	interplanetary magnetic field
IMINT	imagery intelligence
IMO	International Meteor Organization
INFOSEC	information security
INMARSAT	international maritime satellite
INS	inertial navigation system
INSAT	Indian National Satellite
INTELSAT	international telecommunications satellite
IO	information operations
IOC	initial operating capability
IP	internet protocol
IPL	integrated priority list
IPO	integrated program office
IR	infrared
IRBM	intermediate-range ballistic missile
IRIS	Internet Routing in Space
IRS	Indian Remote Sensing (Satellite)
$I_{sp}$	specific impulse
ISR	intelligence, surveillance, and reconnaissance
ISRO	Indian Space Research Organization
ISS	International Space Station
ITAC	Intelligence and Threat Analysis Center



ITOS Improved TIROS Operational Satellite  
 ITW integrated tactical warning  
 ITW/AA integrated tactical warning and attack assessment  
 IUS inertial upper stage

**J**

JAOC joint air operations center (JP 1-02); joint air and space operations center (USAF)  
 JAOP joint air operations plan (JP 1-02); joint air and space operations plan (USAF)  
 JASSM Joint Air-to-Surface Standoff Missile  
 JAXA Japan Aerospace Exploration Agency  
 JBS Joint Broadcast Service  
 JCS Joint Chiefs of Staff  
 JDAM Joint Direct Attack Munition  
 JEM Japanese Experiment Module  
 JERS Japanese Earth Resources Satellite  
 JFACC joint force air component commander (JP 1-02); joint air and space component commander (USAF)  
 JFC joint force commander  
 JFCC joint functional component command  
 JFCC-GS Joint Functional Component Command for Global Strike  
 JFCC-IMD Joint Functional Component Command for Integrated Missile Defense  
 JFCC-ISR Joint Functional Component Command for Intelligence, Surveillance, and Reconnaissance  
 JFCC NW Joint Functional Component Command for Network Warfare  
 JFCC Space Joint Functional Component Command for Space  
 JFLCC joint force land component commander  
 JIEDDO Joint Improvised Explosive Device Defeat Organization  
 JIOC joint information operations center  
 JITI joint in-theater injection  
 JNTF Joint National Test Facility  
 JOA joint operations area  
 JOPES Joint Operation Planning and Execution System  
 JOPP joint operation planning process  
 JP joint publication  
 JRSC jam-resistant secure communications  
 JSAT Japan Satellite System  
 JSCP Joint Strategic Capabilities Plan  
 JSIPS Joint Services Imagery Processing System  
 JSOP joint space operations plan  
 JSOW joint stand-off weapon  
 JSpOC Joint Space Operations Center  
 JSTARS/GSM Joint Surveillance Target Attack Radar System/Ground Station Module  
 JTAGS joint tactical ground station

ACRONYMS AND ABBREVIATIONS

JTF	joint task force
JTF-CND	Joint Task Force-Computer Network Defense
JTF-GNO	Joint Task Force-Global Network Operations
JTFST	Joint Task Force Satellite Terminal
JTRS	Joint Tactical Radio System

**K**

K	Kelvin
Ka	Kurtz-above band
kbps	kilobits per second
KE	kinetic energy
kg	kilogram
kHz	kilohertz
km	kilometer
km/sec	kilometers per second
Ku	Kurtz-under band
kW	kilowatt
kW/s	kilowatts per steradian

**L**

LAAS	Local Area Augmentation System
LADGPS	local-area differential GPS
LADO	Launch, Anomaly Resolution, and Disposal Operations
LANDSAT	land satellite
LASS	low-altitude space surveillance
lb.	pound
lbf.	pound-force
LCC	launch control center
LDR	low data rate
LEGG	launch ejection gas generator
LEO	low Earth orbit
LF	launch facility; low frequency
LH	liquid hydrogen
LISS	linear imaging self-scanning
LITVC	liquid injection thrust vector control
LLV	Lockheed Launch Vehicle
LMLV	Lockheed-Martin Launch Vehicle
LOC	line of communication
LORAN	long-range aid to navigation
LOS	line of sight
LPD	low probability of detection
LPI	low probability of intercept
LPS	large processing station
LPSU	large processing station upgrade
LRIR	Long-Range Imaging Radar
LS	light smooth
LSD	low-speed data

LSMP	low-speed message processor
LSSC	Lincoln Space Surveillance Complex
LSTT	light-weight small tactical terminal
LTRS	Launch Test Range System
LUF	lowest usable frequency
LWIR	long-wave infrared

**M**

m	mass; meter
MACH	modular avionics control hardware
MAGR	miniaturized aircraft GPS receiver
MAJCOM	major command
MARFORSTRAT	Marine Corps Forces, US Strategic Command
MASINT	measurement and signature intelligence
MB	megabyte
MBA	multiple beam antenna
Mbps	megabits per second
MC&G	mapping, charting, and geodesy
MCC	mission control center
MCS	master control station; mission control segment; mission control station
MDM	mission data message
MDR	medium data rate
MECA	missile electronics and computer assembly
MEO	medium Earth orbit
METEOSAT	Meteorological Satellite
METOC	meteorological and oceanographic
MetOp	Meteorological Operational (European satellite program)
MGS	missile guidance set; mobile ground system
MHR	Millstone Hill Radar
MHz	megahertz
mi	mile
MI	military intelligence
microsat	microsatellite
MIDAS	Missile Defense Alarm System
MIES	Modernized Imagery Exploitation System
MILSATCOM	military satellite communications
Milstar	military strategic and tactical relay
MIRV	multiple independently targetable reentry vehicle
MIT	Massachusetts Institute of Technology
MITT	mobile integrated tactical terminal
MLRS	Multiple Launch Rocket System
mm	millimeter
MMOAS	master of military operational art and science
MNAV	M-code navigation
MOC	Milstar Operations Center
MOD	Ministry of Defense

ACRONYMS AND ABBREVIATIONS

MOL	Manned Orbiting Laboratory
MOS	Marine Observation Satellite; modular optoelectronic scanner
MOSC	Moron Optical Space Surveillance (MOSS) Space Operations Center
MOS/PIM	Multiple Orbit Satellite/Program Improvement Module
MOSS	Moron Optical Space Surveillance
MOTIF	Maui Optical Tracking and Identification Facility
mph	miles per hour
MPSOC	Multipurpose Satellite Operations Center
$M_R$	mass ratio
MRBM	medium-range ballistic missile
m/s	meters per second
MSAT	Mobile Satellite
MSF	Milstar Support Facility
MSG	Meteorological Satellite (METEOSAT) Second Generation
MSI	multispectral imagery
MSIC	Missile and Space Intelligence Center
MSIP	multispectral imagery (MSI) processor
MSMR	multifrequency scanning microwave radiometer
MSOC	Milstar Satellite Operations Center
MSS	mobile service system; multispectral scanner
MSSS	Maui Space Surveillance System
MSTS	multisource tactical system
MSX/SBV	Midcourse Space Experiment/Space-Based Vehicle
MT	megaton
MTCR	Missile Technology Control Regime
MTSAT	Multifunctional Transport Satellite
MUE	Modernized User Equipment
MUF	maximum usable frequency
MUOS	Mobile User Objective System
MWIR	medium-wave infrared

**N**

NACA	National Advisory Committee on Aeronautics
NAS	naval air station
NASA	National Aeronautics and Space Administration
NASDA	National Space Development Agency
NASIC	National Air and Space Intelligence Center
NATO	North Atlantic Treaty Organization
NAV	navigation
NAVASTROGRU	Navy Astronautics Group
NAVSAT	navigation satellite
NAVSOC	Naval Satellite Operations Center
NAVSPASUR	Naval Space Surveillance
NAVSPOC	Naval Space Operations Center
NAVWAR	navigation warfare
NCA	National Command Authorities

NDI	nondevelopmental item
NDS	Nuclear Detonation Detection System
NESDIS	National Environmental Satellite, Data, and Information Service
NETWARCOM	Naval Network Warfare Command
NFL	new foreign launch
NGA	National Geospatial-Intelligence Agency
NHK	Nike-Hercules Korea
Ni-Cad	nickel-cadmium
Ni-H <sub>2</sub>	nickel-hydrogen
NIPC	National Infrastructure Protection Center
NIR	near infrared
NITF	national imagery transmission format
nm	nautical mile
NMCC	National Military Command Center
NNSS	Navy Navigation Satellite System
NOAA	National Oceanic and Atmospheric Administration
NORAD	North American Aerospace Defense Command
NPB	neutral particle-beam
NPIC	National Photographic Interpretation Center
NPOESS	National Polar-Orbiting Operational Environmental Satellite System
NPP	National Polar-Orbiting Operational Environmental Satellite System (NPOESS) Preparatory Project
NRL	Naval Research Laboratory
NRO	National Reconnaissance Office
ns	nanosecond
NS	naval station
NSA/CSS	National Security Agency/Central Security Service
NSD	national security directive
NSDD	national security decision directive
NSPC	National Space Council
NSPD	national space policy directive
NSSA	National Security Space Architect
NSSI	National Security Space Institute
NSSO	National Security Space Office
NSST	naval space support team
NSTC	National Science and Technology Council
NSWCDD	Naval Surface Warfare Center, Dahlgren Division
NTR	nuclear thermal rocket
NUDET	nuclear detonation
NWS	North Warning System

## O

O	oxygen molecule
O&M	operations and maintenance
O <sub>2</sub>	oxygen (gas)
OAF	Operation Allied Force

ACRONYMS AND ABBREVIATIONS

OC	operations center
OCC	operations control center
OCM	ocean color monitor
OCO	Orbiting Carbon Observatory
OCS	offensive counterspace; operational control system
OCX	Operational Control Segment of the Future
OEF	Operation Enduring Freedom
OGA	other government agency
OGS	overseas ground station
OIF	Operation Iraqi Freedom
OLS	operational linescan system
OMS	orbital maneuvering system
OPCON	operational control
OPLAN	operation plan
OPORD	operation order
OPSEC	operations security
OSC	offensive space control; Orbital Sciences Corporation
OSEI	Operational Significant Event Imagery
OSINT	open-source intelligence
OSP	Orbital/Suborbital Program
OTH	over the horizon
OTH-B	over-the-horizon backscatter
OTS	Officer Training School
OUSD (A&T)	Office of the Undersecretary of Defense for Acquisition and Technology

**P**

PA	puncture acquisition
PAN	panchromatic
PAR	phased-array radar
PARCS	Perimeter Acquisition Radar Attack Characterization System
PAVE PAWS	Perimeter Acquisition Vehicle Entry Phased-Array Weapons System
PBCS	post-boost control system
PBV	post-boost vehicle
PCA	polar cap absorption
PCM	phase-change material
P-code	precision code
PD	presidential directive
PDD	presidential decision directive
PDOP	position dilution of precision
PE	potential energy
PEC	photoelectric cell
PLGR	precision lightweight global positioning system (GPS) receiver
PMT	photo multiplier tube
PNT	position, navigation, and timing
POES	polar operational environmental satellite;

	polar-orbiting environmental satellite
PPL	preplanned launch
PPS	precise positioning service
PPSE	Perimeter Acquisition Vehicle Entry Phased-Array Weapons System (PAVE PAWS) Southeast
PPSW	Perimeter Acquisition Vehicle Entry Phased-Array Weapons System (PAVE PAWS) Southwest
PR	production requirement
PRD	presidential review directive
PRN	pseudorandom noise
PSAD	Procurement and Systems Acquisition Division
psi	pounds per square inch
PSLV	polar satellite launch vehicle
PSRE	propulsion-system rocket engine
PUP	peripheral upgrade program
PVT	position, velocity, and timing
P(Y)	pseudorandom code

**Q**

QDR	Quadrennial Defense Review
QPSK	quadrature phase shift keying

**R**

R&D	research and development
RAF	Royal Air Force
RAOC	regional air operations center
RCMP	Royal Canadian Mounted Police
RCS	reaction control system
RDS	real-time data smooth
REACT	rapid execution and combat targeting
revs	revolutions
RF	radio frequency
RFI	radio frequency interference
RGS	relay ground station
RISTA	reconnaissance, intelligence, surveillance, and target acquisition
RMS	remote manipulator system
ROCC	regional operations control center
RORSAT	Radar Ocean Reconnaissance Satellite
ROTHR	relocatable over-the-horizon radar
ROW	rest-of-world
RPO	rendezvous and proximity operations
RSC	reaction control system
RSSC	regional satellite communications (SATCOM) support center
RTC	real-time command
RTD	real-time data fine
RTG	radioisotope thermoelectric generator
RV	reentry vehicle

**S**

S&T	science and technology
SA	selective availability
SAA	satellite access authorization
SAASM	Selective Availability Anti-Spoofing Module
SAGE	semiautomatic ground environment
SAM	surface-to-air missile
SAMT	state-of-the-art medium terminal
SAOC	sector air operations center
SAR	satellite access request; search and rescue; special access required; support assistance request; synthetic aperture radar
SARSAT	search and rescue satellite-aided tracking
SATCOM	satellite communications
SATCON	satellite control
SATRAN	satellite reconnaissance advance notice
SBIRS	Space-Based Infrared System
SC	space control
SCA	space coordinating authority
SCC	Space Communications Corp; space control center
SCG	security classification guide
SCI	sensitive compartmented information
SCIS	Survivable Communications Integration System
SCORE	Signal Communications by Orbiting Relay Equipment
SCT	single channel transponder
SDC	Satellite Data Collectors
SDIO	Strategic Defense Initiative Organization
SDS	satellite data system
SEC	Space Environmental Center
SECNAV	Secretary of the Navy
SED	Sensor Evolutionary Development
SEON	Solar Electro-Optical Network
SEP	spherical error probable
SERV	safety-enhanced reentry vehicle
SEU	single-event upset
SFA	space force application
SG	space group
SGP	Simplified General Perturbations (satellite)
SGS	Soviet Geocentric System
SHF	super-high frequency
SID	sudden ionospheric disturbance
SIDC	Space Innovation and Development Center
SIDEARM	Secondary Imagery Dissemination Environment and Resource Manager
SIGINT	signals intelligence
SINCGARS	single channel ground and air radio system
SIOP	Single Integrated Operational Plan
SLBM	submarine-launched ballistic missile



SLC	Space Launch Complex
SLCM	sea-launched cruise missile; submarine-launched cruise missile
SLEP	service life extension program
SLGR	small lightweight global positioning system (GPS) receiver
SLS	space launch squadron
SLV	space launch vehicle
SMABC	Space and Missile Applications Basic Course
SMART-T	Secure Mobile Anti-Jam Reliable Tactical Terminal
SMC	Space and Missile Systems Center
SMDBL	Space and Missile Defense Command (SMDC) Battle Lab
SMDC	Space and Missile Defense Command
SMDCO	Space and Missile Defense Command Operations Center
SOC	satellite operations center; space operations center
SOCC	satellite operations control center
SOH	state of health
SOI	space object identification
SOM	satellite operations manager
SOP	standard operating procedure
SOPS	satellite operations squadron; space operations squadron
SORT	Strategic Offensive Reductions Treaty
SOS	Squadron Officer School
SPACEAF	Space Air Forces
SpaceX	Space Exploration Technologies
SPAWAR	Space and Naval Warfare (Systems Command)
SPC	stored programs command
SPIN	Satellite Communications (SATCOM) Planning Information Network
SPO	special projects office; system programs office
SPOT	Satellite Pour L'Observation de la Terre
SPS	simplified processing station; standard positioning service
SPSS	space surveillance squadron
SRBM	short-range ballistic missile
SRMU	solid rocket motor upgrade
SRS	satellite readout station
SRSU	satellite readout station (SRS) upgrade
SS	space support
SSA	space situational awareness
SSA OPS	space situational awareness operations
SSB	solar sector boundary
SSBN	fleet ballistic missile submarine
SSB/X	gamma ray detector
SSB/X-2	upgraded gamma ray detector
SSC	space surveillance center
SSDC	Space and Strategic Defense Command
SSE	satellite communications (SATCOM) system expert
SSF	laser threat warning sensor
SSI/ES	ionospheric plasma drift and scintillation monitor
SSI/ES-2	enhanced ionospheric plasma drift and scintillation monitor

ACRONYMS AND ABBREVIATIONS

SSI/ES-3	plasma monitor system
SSJ/4	precipitating electron and ion spectrometer
SSJ/5	precipitating particle spectrometer
SSM	triaxial fluxgate magnetometer
SSMA	spread spectrum multiple access
SSMI	special sensor microwave imager
SSMIS	microwave imager/sounder
SSM/T-1	microwave temperature sounder
SSM/T-2	microwave water vapor profiler
SSN	space surveillance network
SST	space support team
SSULI	ultraviolet limb imager
SSUSI	ultraviolet spectrographic imager
START	Strategic Arms Reduction Treaty
STO	space tasking order
STS	space transport system; Space Transportation System (space shuttle)
STT	small tactical terminal
SUNSAT	Stellenbosch University Satellite
SV	space vehicle
SWC	Space Warfare Center
SWF	shortwave fade
SWIR	shortwave infrared
SWO	space weapons officer; space weather officer; space weather operations
SWPC	Space Weather Prediction Center
SWS	space warning squadron; strategic weapon system

**T**

T	thrust
TACDAR	tactical detection and reporting
TACON	tactical control
TACSAT	tactical satellite
TACSATCOM	tactical satellite communications
TACTERM	tactical terminal
TAOS	Technology for Autonomous Operational Survivability
TASR	Tactical Automated Situational Receiver
TAT-1	transatlantic telephone (first cable)
TBM	tactical ballistic missile
TCF	technical control facility
TDDM	time-division data multiplexing
TDDS	tactical related applications (TRAP) data dissemination system
TDOA	time difference of arrival
TDOP	time dilution of precision
TEC	Topographic Engineering Center; total electron content
TEL	transporter erector launcher
TENCAP	tactical exploitation of national capabilities
TERCAT	terrain categorization

TERCOM	terrain contour matching
TES	theater event system
TIBS	tactical information broadcast service
TIROS	television infrared operational satellite
TLAM	Tomahawk Land Attack Missile
TLE	two-line element
TM	thematic mapper
TMD	theater missile defense
TMOS	Transformational Satellite Mission Operations System
TOMS-EP	Total Ozone Mapping Spectrometer-Earth Probe
TOS	Television Infrared Operational Satellite (TIROS) Operational System
TPFDD	time-phased force and deployment data
TR	tracking radar
T/R	transmit/receive
TRADOC	Training and Doctrine Command
TRAP	tactical related applications
TS	thermal smooth
TSAT	Transformational Satellite
TSS	Tri-band SATCOM Subsystem
TT&C	telemetry, tracking, and commanding
TIFF	time to first fix
TTP	tactics, techniques, and procedures
TVC	thrust vector control

## U

UAV	unmanned aerial vehicle
UDMH	unsymmetrical dimethylhydrazine
UE	user equipment
UEE	user equipment error
UERE	user-equivalent range error
UFO	ultra-high frequency follow-on
UHF	ultra-high frequency
ULA	United Launch Alliance
UN	United Nations
UNOOSA	United Nations Office for Outer Space Affairs
URE	user range error
USA	US Army
USAF	US Air Force
USASMDC	US Army Space and Missile Defense Command
USASMDC/ARSTRAT	US Army Space and Missile Defense Command/Army Forces Strategic Command
USCENTCOM	US Central Command
USMC	US Marine Corps
USNO	US Naval Observatory
USSPACECOM	US Space Command
USSTRATCOM	US Strategic Command

ACRONYMS AND ABBREVIATIONS

UTC Coordinated Universal Time  
UV ultraviolet  
UWB ultrawideband

**V**

VDOP vertical dilution of precision  
VHF very high frequency  
VLF very low frequency

**W**

WAAS Wide Area Augmentation System  
WADGPS wide-area differential global positioning system (GPS)  
WAGE wide-area global positioning system (GPS) enhancement  
WEFAX weather facsimile  
WGS Wideband Global Satellite Communications (SATCOM)  
WGS 84 World Geodetic System 1984  
WiFS wide field sensor  
WIN-T War-fighter Information Network Tactical Terminal  
WOC wideband operations center  
WSMR White Sands Missile Range  
WSOC wideband satellite operations center

**X**

XDOP X or north-south dilution of precision  
XDR extended data rate  
XIPS xenon-ion propulsion system

**Y**

YDOP Y or east-west dilution of precision  
YMCA P(Y), M, and C/A codes (for global positioning system)

**Z**

ZY Zi Yuan