

Appendix D

List of Acronyms

Acronym	Definition
2-D	Two-Dimensional
3-D	Three-Dimensional
A/A	Air-to-Air
A/C	Aircraft
A/D	Analog-to-Digital
A/G	Air-to-Ground
ABCCC	Airborne Command Control, and Communications
ABL	Airborne Laser
ACIR	Airborne Coherent Imaging Radar
ACS	Aerosol-Particle Collection/Detection System
ACSC	Air Command and Staff College
ADC	Analog-to-Digital Conversion/Converters
ADPE	Automated Data Processing Equipment
AE	Acoustic Emission
AESA	Active Electronically Scanned Array
AF	Air Force
AGL	Above Ground Level
AFSOC	Air Force Special Operations Command
AI	Artificial Intelligence
a.k.a.	also known as
AM	Amplitude Modulation
AMOS	Air Force Maui Optical Station
AOIs	Areas of Interests
APD	Avalanch Photodiode
ARM	Anti-Radar/-Radiation Missile
ARPA	Advanced Research Projects Agency

ASC	Automatic Sensor Cueing
ASP	Adaptive Signal Processing/Processor
ATARS	Advanced Tactical Air Reconnaissance System
ATC	Automatic Target Cueing
ATO	Air Tasking Order
ATR	Automatic Target Recognition
ATS	Automatic Target Screener
AWACS	Airborne Warning and Control System
BDA	Battle Damage Assessment Bomb Damage Assessment
BIDS	Biological Integrated Detection System
BIT	Built-in Test
BITE	Built-in Test Equipment
BM	Ballistic Missile
BMDO	Ballistic Missile Defense Office
BPI	Boost Phase Intercept
BW	Biological Warfare/Weapon
C ²	Command and Control
C ³	Command, Control & Communications
C ³ I	Command, Control, Communications & Intelligence
C ⁴ I	Command, Control, Communications, Computers & Intelligence
CAS	Close Air Support
CBW	Chemical & Biological Warfare
CC&D	Camouflage, Concealment, and Deception
CCD	Charge-Coupled Device
CE	Capillary Electrophoresis
CELL	Surface Emitting Laser Logic
CEP	Circular Error Probable
CFAR	Constant False Alarm Rate
CM	Cruise Missile
CMO	Central MASINT Office
CMOS	Complementary Metal-Oxide-Semiconductor (MOS)

CND	Can Not Duplicate
CNI	Communication, Navigation, & Identification
COG	Configureable Optical Gate
CONOPS	Concept of Operations
CONUS	Continental United States
COTS	Commercial-Off-the-Shelf
CP	Counter-Proliferation
CRDA	Cooperative Research and Development Agreement
CTD	Concealed Target Detection
CW	Continuous-Wave (Radar) Chemical Warfare
CWD	Concealed Weapon Detection
DAS	Detector Angular Subtense
dB	decibel
DC	Direct Current
DF	Direction-Find
DDL	Diode Laser Logic
DGPS	Differential Global Positioning System
DIAL	Differential Absorption LIDAR
DoD	Department of Defense
DPCA	Displaced Phase Center Antenna/Array
DRAM	Dynamic RAM (Random-Access Memory)
DSP	Digital Signal Processing/Processor
EDAC	Error Detection and Correction
ECM	Electronic Countermeasures
EDM	Engineering Development Model
EM	Electromagnetic
EMD	Engineering & Manufacturing Development
EMI	Electromagnetic Interference
EMP	Electromagnetic Pulse
EO	Electro-Optical
EOB	Electronic Order of Battle

ERIM	Environmental Research Institute of Michigan
ESM	Electronic Support Measures
EW	Electronic Warfare Early Warning
FC	Fire Control
FET	Field Effect Transistor
FFT	Fast Fourier Transform
FIT	Fault Isolation Test
FLIR	Forward Looking IR (Infrared)
FM	Frequency Modulation
FOG-M	Fiber Optic Guided Missile
FOPEN	Foliage Penetrating (Radar)
FOV	Field of View
FPA	Focal Plane Array
f_T	unity-current-gain frequency
G	Gravity
GBR	Ground-Based Radar
GEODSS	Ground-based Electro-Optical Deep Space Surveillance
GIS	Geographic Information Systems
GMTI	Ground Moving Target Indicator
GPEN	Ground Penetration Radar
GPS	Global Positioning System
GSPS	Giga Samples per Second
GTD	Global Topographical Data
HAE	High Altitude Endurance
HBT	Heterostructure Bipolar Transistor
HF	High Frequency
HPT	Heterostructure Photo Transistor
HR-RTR	High Resolution Real-Time Radioscopy
HS	Hyperspectral
HUMINT	Human Intelligence
HYDICE	Hyperspectral Sensor

I&W	Indications & Warning
I/O	Input/Output
I/T	Integration/Testing
IC	Integrated Circuit
ID	Identification
IEEE	Institute of Electrical & Electronics Engineers
IFF	Identify Friend, or Foe
IFFN	Identify Friend, or Foe, or Neutral
IFSAR	Interferometric Synthetic Aperture Radar
IMA	Integrated Multifunction Aperture
IMU	Inertial Measurement Unit
INL	Integral Nonlinearity
INS	Inertial Navigation System
IPB	Intelligence Preparation of the Battlefield
IPL	In-Plane Laser
IR	Infrared
IRCM	Infrared Countermeasures
IRS	Indian Remote Sensing (satellite)
IRST	Infrared Search and Track
JAST	Joint Advanced Strike Technology (program)
JDL	Joint Directors of Laboratories
JERS	Japan Earth Resources Satellite
JFACC	Joint Force Air Component Commander
JFC	Joint Force Commander
JSTARS	Joint Surveillance & Target Attack Radar System (a.k.a. Joint STARS)
Joint STARS	Joint Surveillance & Target Attack Radar System (a.k.a. JSTARS)
LADAR	Laser Detection and Ranging
LAN	Local Area Network
LANDSAT	Land (survey remote sensing) Satellite
LANTIRN	Low Altitude Navigation & Targeting IR for Night
LCC	Life Cycle Cost

LE	Law Enforcement
LED	Light Emitting Diode
LIDAR	Light Detection and Ranging
LIF	Laser-Induced Fluorescence
LLNL	Lawrence Livermore National Laboratory
LO	Low Observable
LOC	Lines of Communication
LOP	Lines of Position
LPI	Low-Probability-of-Intercept
LSI	Large Scale Integration
LWIR	Long-wave IR (Infrared)
MALDI-TOFMS	Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry
MASINT	Measurements and Signals Intelligence
MBE	Molecular-Beam Epitaxy
MCD-D	McDonald-Douglas Mechanical Systems
MEMS	Micro-Electro-Mechanical Systems
MILSTAR	Military Strategic & Tactical Relay
MIMIC	Microwave & Millimeter Wave Integrated Circuits (program)
MIPS	Mega Instructions per Second
MIT	Massachusetts Institute of Technology
MIT/LL	MIT/Lincoln Laboratory
MLD	Missile Launch Detection
MLW	Missile Launch Warning
MMIC	Monolithic Microwave Integrated Circuits
MMW	Millimeter Wave
MOOTW	Military Operations Other Than War
MOS	Metal-Oxide-Semiconductor
MOTIF	Maui Optical Tracking & Identification Facility
MPP	Multi-Pinned-Phase
MRC	Major Regional Conflict

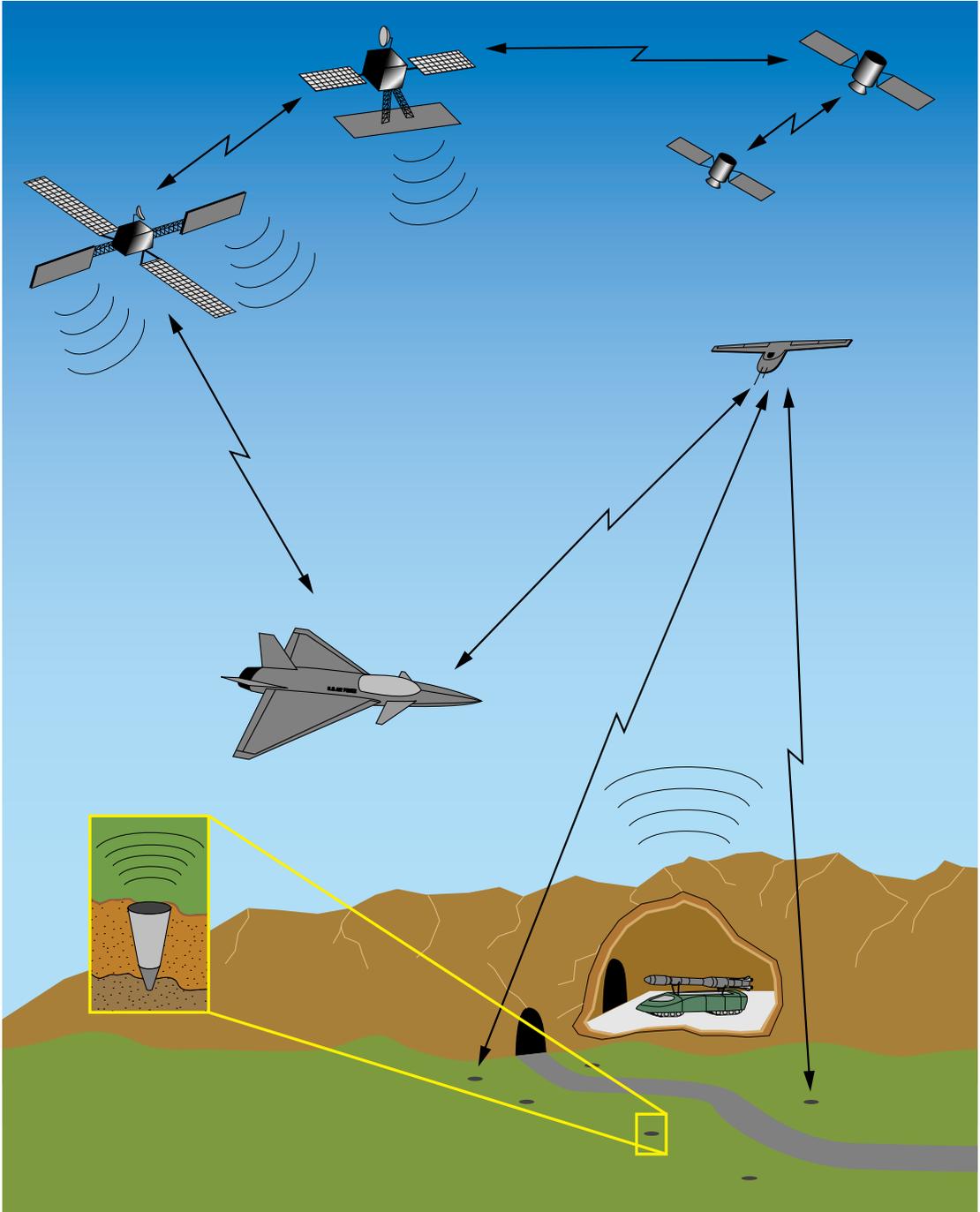
MS	Multi-Spectral
MSPS	Mega Samples per Second
MTBF	Mean Time Between Failures
MTBCF	Mean Time Between Critical Failures
MTF	Modulation Transfer Function
MTI	Moving Target Indication/Indicator
MW	Millimeter Wave
MWIR	Medium-wave IR (Infrared)
MWR	Missile Warning Receiver
NAV	Navigation
NAWC	Naval Air Warfare Center
NBC	Nuclear, Biological, & Chemical (warfare)
NCA	National Command Authority
NCTR	Non-cooperative Target Recognition
NDI	Non-Destructive Interference (Acoustic) Non-Destructive Inspection
NIJ	National Institute of Justice
NIR	Near IR (Infrared)
NLECTC	National Law Enforcement & Corrections Technology Center
NLECTC/NE	National Law Enforcement & Corrections Technology Center/Northeast Region
NPR	Noise Power Ratio
NRL	Naval Research Laboratory
NSDI	National Spatial Data Infrastructure
NUC	Nonuniformity Correction
NVG	Night Vision Goggles
NWV	New World Vistas
O&M	Operations and Maintenance
OA	Obstacle Avoidance
OCR	Optical Character Recognition
ODB	Optical Data Bus
OOTW	Operations Other Than War

OPO	Optical Parametric Oscillator
Ops	Operations
ORTD	Optical RTD (Resonant Tunneling Device)
OTH	Over-the-Horizon
PA	Product Assurance
PAIIN	Portable Automated Inspection Instruments
PCR	Polymerase Chain Reaction
PCS	Personal Communications Services
P_d	Probability of Detection
P_{dis}	Power Dissipation
P_{fa}	Probability of False Alarm
PGM	Precision Guided Munitions
Pixel	Picture Resolution Element
PL	Phillips Laboratory
QBIC	Query-by-Information Element
QE	Quantum Efficiency
QWIPS	Quantum Well Infrared Photodectors
R&D	Research & Development
RADCON	Radar Detection of Concealed Time Critical Targets
RAM	Random-Access Memory
RASS	Radio-Acoustic Sounding System
RCS	Radar Cross Section
Recce	Reconnaissance
RF	Radio Frequency
RL	Rome Laboratory
ROI(s)	Region(s) of Interest
ROIC	Read Out IC (Integrated Circuit)
ROM	Rough Order of Magnitude
ROW	Rest of World
RPV	Remotely Piloted Vehicle
RRI	Riverside Research Institute

RSD	Relative Standard Deviation
RTD	Resonant Tunneling Device
RTOK	Retest OK
RV	Re-entry Vehicle Reconnaissance Vehicle
RWR	Radar Warning Receiver/Radar
S&T	Science & Technology
S/W	Software
SAR	Synthetic Aperture Radar
SAW	Surface Acoustic Wave
SBIR	Small Business Innovation Research
SEAD	Suppression of Enemy Air Defences
SEED	Self-Electro-optic Effect Device
SFA	Segmented Flow Analysis
SFDR	Spurious-Free Dynamic Range
SGMTI	Slow Ground MTI (Moving Target Indication)
SIGINT	Signal Intelligence
SMSR	Side-Mode Suppression Ratio
SNR	Signal to Noise Ratio
SO	Special Operations
SOAP	Spectroscopic Oil Analysis Program
SOF	Special Operations Forces
SOI	Space Object Identification
SO/MOOTW	Special Operations and Military Operations Other Than War
SPR	Statistical Pattern Recognition
SRAM	Static RAM (Random-Access Memory) Short-Range Attack Missile
STAP	Space-Time Adaptive Processing
STC	Stanford Telecommunications
STTR	Small Business Technology Transfer Program
SWIR	Short-wave IR (Infrared)
T/R	Transmit/Receive
TA	Terrain Avoidance

TAD	Tactical Air Defense
TBD	To Be Determined
TBM	Theater Ballistic Missile
TCS	Television Camera Set
TDI	Time Delay and Integration
TEC	Topographical Engineering Center
TEL	Transporter-Erector-Launcher
TERCOM	Terrain Aided Navigation
TF	Terrain Following
TI	Texas Instruments
TIMS	Thermal Infrared Mapping System
TIR	Thermal Infrared
TM	Terrain Mapping
TMD	Theater Missile Defense
TPIPT	Technology Planning Integrated Product Team
TSMD	Time/Stress Measurement Device
TV	Television
UAV	Unmanned Air Vehicle
UGF	Underground Facility
UGS	Unattended Ground Sensor(s)
UHF	Ultra High Frequency
UHR	Ultra High Resolution
UN	United Nations
US	Ultraspectral
UV	Ultraviolet
UWB	Ultra-Wideband
VAD	Vertical Azimuth Display
VCSEL	Vertical Cavity Surface Emitting Laser
VHF	Very High Frequency
VIS	Visible
V-LOGIC	Vertical Lasers with Optical Gain Control

VLSI	Very Large Scale Integration
VNIR	Very Near IR (Infrared)
VOC	Volatile Organic Chemical
WDM	Wavelength Division Multiplexed/Multiplexing
WL	Wright Laboratory
WMD	Weapons of Mass Destruction
wrt	with respect to



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