

# Appendix D

## List of Acronyms

<b>Acronym</b>	<b>Definition</b>
ABC	Advanced Battery Consortium
ADN	ammonium dinitramide
AEA	all-electric aircraft, All Electric Aircraft program
AFOSR	Air Force Office of Scientific Research
AIAA	American Institute of Aeronautics and Astronautics
AMRAAM	Advanced Medium Range Air to Air Missile
AN	ammonium nitrate
APU	auxiliary power unit
ARPA	Advanced Research Projects Agency
ASIP	Airframe Structural Integrity Program
BMDO	Ballistic Missile Defense Organization
BUPS	back-up power source
CAT	computer-aided tomography
CBM	condition-based maintenance
CBW	chemical and biological weapons
CCD	charge-coupled device
CFD	computational fluid dynamics
CL-20	a propellant/explosive oxidizer
CMC	ceramic matrix composites
CTE	coefficient of thermal expansion
CVD	chemical vapor deposition
DFA	damage function analysis
DFE	design for environment
DoD	Department of Defense
DOE	Department of Energy
DTA	damage tolerance analysis
EMI	electromagnetic interference

EPA	Environmental Protection Agency
FMS	foreign military sales
FSU	former Soviet Union
GOX	gaseous oxygen
GPS	global positioning system
GSO	geosynchronous orbit
HAP	hazardous air pollutants
HEDM	high energy density matter, High Energy Density Materials program
HEMT	high electron mobility transistors
HMX	high melting explosive
HPT	high-pressure turbine
HSCT	high speed civil transport
HUD	heads-up display
HYTECH	Hypersonic Technology program
Isp	specific impulse
ICE	internal combustion engine
IHPRPT	Integrated High Payoff Rocket Propulsion Technology program
IHPTET	Integrated High Performance Turbine Engine Technology program
IM	insensitive munitions
IR	infrared
IRNFA	an oxidizer
LCA	life-cycle analysis, life-cycle assessment
LEO	low earth orbit
LO	low observability, low observable
LOX	liquid oxygen
LPT	low-pressure turbine
MBE	molecular beam epitaxy
MEA	more-electric aircraft, More Electric Aircraft program
MEMS	microelectromechanical system
MEMS	micro-electronic machine system
MIC	metastable interstitial composite

MICOM	Army Missile Command
MMC	metal matrix composites
MMH	monomethyl hydrazine
MOU	memorandum of understanding
NASP	National Aerospace Plane Program
NDE/I	nondestructive evaluation/inspection
NIST	National Institute of Standards and Technology
NLO	non-linear optics
NMEL	New Materials Exploration Loop
NSF	National Science Foundation
NWV	New World Vistas
O&M	operations and maintenance
ODC	ozone-depleting chemicals
OMC	organic matrix composites
ONR	Office of Naval Research
PDLC	polymer dispersed liquid crystal
PDM	programmed depot maintenance
PEM	proton exchange membrane
PSAN	phase stabilized ammonium nitrate
QPA	qualitative process algorithm
R&D	research and development
REFTECH	refurbishment technology
RF	radio frequency
RFC	retirement for cause
RLV	reusable launch vehicle
SAB	Scientific Advisory Board
SCFN	spherical convergent flap nozzle
SERDP	Strategic Environmental Research and Development Program
SETAC	Society of Environmental Toxicology and Chemistry
SFC	specific fuel consumption
SOA	state-of-the-art

SPE	solid polymer electrolyte
SQUID	super conducting interference device
SSTO	single stage to orbit
T <sub>3</sub>	compressor discharge temperature
T <sub>41</sub>	high pressure turbine inlet temperature
TEX	an oxidizer
TNAZ	trinitro-azetidine
TOGW	take-off gross weight
TPE	thermoplastic elastomers
UDMH	unsymmetrical dimethyl hydrazine
USAF	United States Air Force
UV	ultraviolet
VOC	volatile organic compound