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## ACRONYM GLOSSARY

$\Delta \mathbf{V}$	Change of Velocity	ELM	Earth Launch Mass
A&R	Automation and Robotics	ELV	Expendable Launch Vehicle
ABL.	Anthropometry and Biomechanics Laboratory	EMPA	Electron Microprobe Analysis
AC	Alternating Current	EMT	Electromagntic Translator
ACC	Aft Cargo Carrier	EMU	Extravehicular Mobility Unit
ACS	Attitude Control Subsystem	EOI	Earth Orbit Insertion
AEC	Atomic Energy Commision	EPS	Electrical Power System
AI	Attitude Indicator	ESECOM	Committee on Environmental, Safety, and Economic Aspects
AL	Action Limit	ETO	of Magnetic Fusion Energy  Earth-to-Orbit
ALSE	Autolander Active Lunar Seismic Experiment	ETR	Engineering Test Reactor
ALSEP	Apollo Lunar Surface Experiment Package	ETS	Extraterrestrial Station
ALSPE	Anomalously Large Solar Proton Event	ETV	Earth Transfer Vehicle
AMCD	Annular Momentum Control Device	EVA	Extravehicular Activity
AOL	Airborne Oceanographic Lidar	FBR	Fluidized Bed Reactor
AP	Agricultural Plant	FDIR	Fault Detection, Identification, and Reconfiguration
APP	Astrofuel Production plant	FMEA	Failure Mode and Effects Analysis
APS	Ascent Propulsion System	FMECA	Failure Mode and Effects Criticality Analysis
APSA	Advanced Photovoltaic Solar Array	FMR	Ferromagnetic Resonance
APT	Antarctic Planetary Testbed	FTA	Fault Tree Analysis
ARC	Ames Research Center	GCTCA	Ground Control Television Cameras Assembly
ARCO	Atlantic Richfield Company	GEO	Geosynchronous Earth Orbit
ASD	Advanced Solar Dynamic	GN&C	Guidance, Navigation, and Control
ASE	Advanced Space Engine	HDAB	Hexadecyl Trimethyl Ammonium Bromide
ASO	Active Solar Optics	HI	Heading Indicator
ASPS	Adaptable Space Propulsion System	HID	High Intensity Discharge
ASTM	American Society for Testing Materials	HILV	Heavy Lift Launch Vehicle
BMC	Bone Mineral Content	HIV	Heavy Lift Vehicle
BPC	Biomass Production Chamber	HM IF	Habitation Module
C&D C&T	Control and Display	IF IIP	Intermediate Frequency Imaging Impact Probe
CCGE	Communications and Tracking Cold Cathode Gauge Experiment	IMF	Initial Mass Function
CDS	Command and Data Subsystem	IMU	Inertial Measurement Unit
CEC	Cation Exchange Capacity	IOC	Initial Operational Capabilty
CELSS	Controlled Ecological Life Support System	.00	Initial Operating Capacity
CER	Cost Estimating Relationship	IR	Infrared
CETF	Critical Evaluation Task Force	IRAS	Infrared Astronomy Satellite
CL	Crew Lander	IRR	Internal Rate of Return
CLAS	Crew Lander-Ascent Stage	I <sub>s</sub> /FeO	FMR intensity normalized to total iron content (soil
CLDS	Crew Lander-Descent Stage		maturity index)
CLEFT	Cleaved Lateral Epitaxy for Film Transfer	ISA	Inertial Sensor Assembly
CLP	Closed Loop Processing	$I_{sp}$	Specific Impulse
CLSI	Civil Space Leadership Initiative	ISY	International Space Year
CM	Center of Mass	IVA	Intravehicular Activity
CMC	Command Module	IWWMS	Integrated Waste and Water Management System
CMG	Control Moment Gyro	JPL.	Jet Propulsion Laboratory
CNDB	Civil Needs Data Base	JSC	Johnson Space Center  Potentiam Reac Forth Florents and Phoenhams
COBE	Cosmic Background Explorer	KREEP KSC	Potassium, Rare-Earth Elements, and Phosphorus Kennedy Space Center
CPLEE	Cost of Energy Charged Particle Lunar Environment Experiment	LACE	Lunar Atmosphere Composition Experiment
CPS	Capillary Plant Support	LaRC	Langley Research Center
CSAR	Coherent Synthetic Aperture Radar	LCRU	Lunar Communications Relay Unit
CSM	Command Service Module	IDC	Less Developed Country
CSTI	Civil Space Technology Initiative	LDEF	Long Duration Exposure Facility
	Civilian Space Technology Initiative	LEO	Low Earth Orbit
D	Deuterium	LeRC	Lewis Research Center
DC	Direct Current	LGO	Lunar Geoscience Orbiter
DCE	Drive Control Electronics	LH <sub>2</sub>	Liquid Hydrogen
DDT&E	Design, Development, Testing, and Evaluation	LIPO	Lunar Imaging Polar Orbiter
DG	Directional Gyro	шо	Low Lunar Orbit
DKC	Design Knowledge Capture	LLOX	Lunar Liquid Oxygen
DMS	Data Management System	LM	Lunar Module (also LEM)
DOF	Degrees of Freedom	LMDE	Lunar Module Descent Engine
DPS	Descent Propulsion System  Emergency Corp. Cooling Systems	IO	Lunar Orbiter
ECCS	Emergency Core Cooling Systems	IOI	Lunar Orthophotomap
ECCV	Earth Crew Capture Vehicle Environmental Control and Life Support	LOI LOLA	Lunar Observer Lacer Altimeter
ECLS ECLSS	Environmental Control and Life Support Environmental Control and Life Support System	LOP	Lunar Observer Laser Altimeter Lunar Orbital Prospector
ECLSS	Embedded Data Processor		Local Transporation Vehicle
EDS	Earth Departure Stage	LOX	Liquid Oxygen
EDX	Energy Dispersive X-Ray	LRU	Line Replacable Unit
EEO	Elliptical Earth Orbit	LRV	Lunar Roving Vehicle
	Eccentric Earth Orbit	LSA	Level of Safety Assurance

LSE	Lunar Sounder Experiment	RIG	Radioisotope Thermoelectric Generator
LT	Low Titanium	RLG	Ring Laser Gyro
LTO	Lunar Topographic Orthophotomap	RMP	Regolith Mining Plant
LULOX	Lunar Liquid Oxygen	RMS	Root-Mean Square
LUO	Lunar Orbit	RO	Relay Orbiter
LVDT	Linear Variable Differential Transformer	<b>701</b>	Reverse Osmosis
LVLH	Local Vertical/Local Horizontal	ROM	Read-Only Memory
MACS	Modular Attitude Control System	RRS	Remote Raman Spectrometer
MCC	Mission Control Center	RSM RTG	Radar Subsurface Mapper
MDM MEB	Multiplexer/Demultiplexer  Main Electronics Box	RTM	Radioisotope Thermoelectric Generator
MERI	Moon-Earth Radio Interferometer	SAB	Resource Transportation Module Spacecraft Analysis Branch
MFV	Moon Flight Vehicle	SCS	Supplemental Cooling Cart
MHD	Magnetohydrodynamic	SCUBA	Self-Contained Underwater Breathing Apparatus
MLI	Multilayer Insulation	SD	Single Domain
MMH	Monomethyl Hydrazine		Solar Dynamic (Generator)
MOI	Mars Orbit Insertion	SDF	System Development Facility
MOSAP	Mobile Surface Applications	SDP	Standard Data Processor
MPD	Magnetoplasmadynamic	SEM	Scanning Electron Microscope
MPR	Mean Payback Ratio	SHA	System Hazard Analysis
MPS	Maximum Permissible Limit	SI	Speed Indicator
MSFC	Marshall Space Flight Center	SIDE	Suprathermal Ion Detector Experiment
MSIF	Multiple System Integration Facility	SLAP	Shuttle Laser Altimeter Prototype
MTV	Mars Transfer Vehicle	SM	Service Module
NAS	National Academy of Sciences	SMRM	Solar Maximum Recovery Mission
NASA	National Aeronautics and Space Administration	SINR	Signal-to-Noise Ratio
NCOS	National Commission on Space	SO	Solar Optics
NEP	Nuclear-Electric Propulsion	SPF	Software Production Facility
NET NI	New European Torus	SPS SPU	Service Propulsion System Signal Processing Unit
NIOSH	Navigational Impactor  National Institute of Occupational Safety and Health	SSE	Signal Processing Unit Software Support Environment
NSF	National Science Foundation	SSHA	Subsystem Hazard Analysis
NSO	Nuclear-Safe Orbit	SSME	Space Shuttle Main Engine
OAET	Office of Aeronautics, Exploration, and Technology	STP	Standard Temperature and Pressure
OAST	Office of Aeronautics and Space Technology	STS	Space Transportation System
OMA	Operations Management Application	<b>SW</b> 'S	Solar Wind Spectrometer
OMGA	Operations Management Ground Application	T	Tritium
OMS	Operations Management System	TCS	Thermal Control System
	Orbital Maneuvering System	TDRSS	Transmission and Data Relay Satellite System
OMV	Orbital Maneuvering Vehicle	TE	Thermoelectric
OPP	Oxygen Production Plant	TEA	Torque Equilibrium Angle
OPWC	Oxygen Plasma Waste Conversion	TEI	Trans-Earth Injection
OSHA	Operating and Support Hazard Analysis	TEM	Transmission Electron Microscope
OFFICE .	Occupational Safety and Health Administration	TIC	Time Interval Counter
OTSF	Orbiting (Orbital) Transfer (Transportation) and Staging	TIMES	Thermoelectric Integrated Membrane Evaporation System
OTT	Facility Orbital Transfer Valida	TLI TLP	Translunar Injection
OTV PAR	Orbital Transfer Vehicle Photosynthetic Active Radiation	TMI	Transient Lunar Phenomenon Trans-Mars Injection
PEC	Photoelectrochemical	TOC	Total Organic Carbon
PHA	Preliminary Hazard Analysis	TTV	Tether Tip Vehicle
PHM	Planetary Habitation Module	TV	Television
PIDDP	Planetary Instrument and Definition and		Thrust Vector
	Development Program	TVS	Thermodynamic Vent System
PLC	Programmable Logic Controller	UF	Ultrafiltration
PLG	Prism Light Guide	UV	Ultraviolet
PLSS	Portable Life Support System	V&V	Validation and Verification
PMAD	Power Management and Distribution	VAT	Vehicle Assembly Tent
PP	Power Plant	VAX	Virtual Address Extension
PPF	Photosynthetic Photon Flux	VCD	Vapor Compression Distillation
PPU	Power Processing Unit	VCS	Vapor Cycle System
PRF	Pulse Repetition Frequency	VCDE	Vapor-Cooled Shield
PRV	Propellant Refill Vehicle	VGRF VHK	Variable Gravity Research Facility
PSO PTF	Passive Solar Optics Propellant Tank Farm	VHT	Very High Potassium Very High Titanium
PV	Photovoltaic	VIMS	Visible/Infrared Mapping Spectrometer
1 7	Pioneer Venus	VIS	Visible
PVC	Polyvinyl Chloride	VI.A	Very Large Array
PWM	Pulse Width Modulator	VLBI	Very Long Baseline Interferometry
PZ	Piezoelectric	VLF	Very Low Frequency
R&D	Research and Development	VLFA	Very Low Frequency Array
RCS	Reaction Control System	VLT	Very Low Titanium
REE	Rare-Earth Elements	VMS	VAX Monitoring System
RF	Radio Frequency		Velocity Measurement System
RFC	Regenerative Fuel Cell	VPCAR	Vapor Phase Catalytic Ammonia Removal System
RFP	Request for Proposal	WDR	Waste Disposal Rating
RI	Range Indicator		