

## → 8 ACRONYMS

2-D	Two-dimensional space
3-D	Three-dimensional space
AC	Alternating Current, Assembly Complete
ACES	Atomic Clock Ensemble in Space
AEB	Agência Espacial Brasileira (Brazilian Space Agency)
AIT	Assembly, Integration and Test
AMS	Alpha Magnetic Spectrometer
AO	Announcement of Opportunity
APBUS	Attached Payload BUS
AR	Acceptance Review
ARED	Advanced Resistive Exercise Device
ARIS	Active Rack Isolation System
ASI	Agenzia Spaziale Italiana (Italian Space Agency)
ASIM	Atmosphere Space Interactions Monitor
ATPL	Airline Transport Pilot License
ATV	Automated Transfer Vehicle
AQH	AQuatic Habitat
AVI	Audio Video Interleaved
BIOTESC	BIOTEchnology Space support Centre
BMP	Bitmap image file
BNC	Bayonet Neill–Concelman
B-USOC	Belgian User Support and Operations Centre
C&DH	Command and Data Handling
CADMOS	Centre d'Aide au Développement des activités en Micro-pesanteur et des Opérations Spatiales
CAM	Commercial, Aviation and Military equipment
CAR	Centre d'Alt Rendiment
CASE	Californium-252 Assessment of Single event Effects
CB	Clean Bench
CBEF	Cell Biology Experiment Facility
CC	Catapult Capsule
CCD	Charge Coupled Device
CCIR	Consultative Committee for International Radio
CCS	Capsule Control System
CDR	Critical Design Review
CEF	Columbus Exposed Facility
CEPA	Columbus External Payload Adapter
CEPF	Columbus External Payload Facility
CETSOL	Columnar-Equiaxed Transition in SOLidification processing
CEV	Centre d'Essais en Vol
CEVIS	Cycle Ergometer with Vibration Isolation and Stabilization System
CFU	Colony Forming Units
CheCS	Crew health Care System
CIR	Combustion Integrated Rack

CMGs	Control Moment Gyroscopes
CMOS	Complementary Metal–Oxide–Semiconductor
CMRS	Crew Medical Restraint System
CNES	Centre National d'Etudes Spatiales
CO <sub>2</sub>	Carbon dioxide
CoFR	Certificate of Flight Readiness
COG	Centre of Gravity
COL-CC	Columbus Control Centre
COMEX	COmpagnie Maritime d'EXpertises
COP	Composite Operations Plan
CORA	Continuously Open Research Announcement
CORIA	COmplexe de Recherche Interprofessionnel en Aérothermochimie
COUP	Consolidated Operations and Utilisation Plan
CPL	Commercial Pilot License
CPP	Comité pour la Protection des Personnes
CSA	Canadian Space Agency
CUP	Composite Utilisation Plan
DAC	Danish Aerospace Company
DC	Direct Current
DCM	Docking Cargo Module
DESC	Dutch Experiment Support Center
DGA	Direction Générale de l'Armement
DIN	Deutsches Institut für Normung
DLR	Deutschen zentrum für Luft- und Raumfahrt
DN	Diametre Nominal
DOSIS	Dose Distribution Inside the ISS
DOSTEL	DOSimetry TElescopes
DR	Design Review
DVcam	Digital Video camera
DVS	Digital Video System
EC	Erasmus Centre, Experiment Container
ECG	Electrocardiography
ECM	Experiment Container Module
ECSS	European Cooperation for Space Standardisation
EDR	European Drawer Rack
EEA	Erasmus Experiment Archive
EEE	Electrical Electronic Electromechanical
EF	Exposed Facility
EGSE	Electronic Ground Support Equipment
EHIC	European Health Insurance Card
ELC	Express Logistics Carrier
ELIPS	European Programme for Life and Physical Sciences in Space
ELM	Experiment Logistics Module
EM	Engineering Model, Experiment Model
EMCS	European Modular Cultivation System
EMI	ElectroMagnetic Interference
EMIR	European Microgravity Research Programme
EMUs	Extravehicular Mobility Units

EPC	Experiment Power Control
EPF	External Payload Facility
EPM	European Physiology Modules, Equipped Pressurised Module
ERA	European Robotic Arm
ERS	European Recovery System
ES	Exposed Section, Evolution Storable
ESA	European Space Agency
ESDP	Experiment Safety Data Package
ESF	European Science Foundation
ESM	Estrange Safety Manual
ESP	External Stowage Platform
ESR	Experiment Scientific Requirements
ESRO	European Space Research Organisation
ESTEC	European Space Research and Technology Centre
ETC	European Transport Carrier
EUB	European Utilisation Board
E-USOC	Spanish User Support and Operations Centre
EuTEF	European Technology Exposure Facility
EVA	Extra Vehicular Activity
EWACS	Emergency Warning and Caution System
EXEMSI	Experimental Campaign for the European Manned Space Infrastructures
EXPRESS	EXpedite the Processing of Experiments to Space Station
FA	Feasibility Assessment
FAA	Federal Aviation Administration
FAR	Flight Acceptance Review
FASTER	Facility for Adsorption and Surface Tension
FCF	Fluids and Combustion Facility
FFM	Free Fall Machine
FGB	Functional Cargo Block
FIR	Fluids Integrated Rack
FM	Frequency Modulation
FP	Flight Programme
FPEF	Fluid Physics Experiment Facility
FRAM	Flight Releasable Attachment Mechanism
FRC	Facility Responsible Centre
FRR	Flight Readiness Review
FSC	Facility Support Centre
FSE	Flight Support Equipment
FSL	Fluid Science Laboratory
FST	Flight Simulation Test
GANIL	Grand Accelérateur National d'Ions Lourds
GCR	Galactic Cosmic Rays
GCS	Guidance Control System
GHF	Gradient Heating Facility
GLACIER	General Laboratory Active Cryogenic ISS Experiment Refrigerator
GN <sub>2</sub>	Gaseous nitrogen
GPS	Global Positioning System
GPQ	Guidelines for Production & Quality Control

GRAVI	Threshold Acceleration for Gravisensing
GSE	Ground Support Equipment
GSI	Gesellschaft für Schwerionenforschung
GTS	Global Transmission System
HDR	High Data Rate
HR	Human Research
HRF	Human Research Facility
HSO	Human Spaceflight and Operations
HSR	Human Spaceflight Research
HTV	H-II Transfer Vehicle
HUBES	HUMAN Behaviour in Extended Spaceflight
IBMP	Russian Institute for Biomedical Problems
ICD	Interface Control Document
ID	Identification
IDRD	Increment Definition and Requirements Document
IEEE	Institute of Electrical and Electronic Engineers
IGA	Inter Governmental Agreement
ILSRA	International Life Science Research Announcement
INA	Interstage Adapter
IP	International Partner
IPR	Intellectual Property Rights
IPU	Image Processing Unit
IRD	Interface Requirement Document
IREDD	Interim Resistive Exercise Device
ISEMSI	Isolation Study for European Manned Space Infrastructures
ISERV	ISS SERVIR Environmental Research and Visualization System
ISIS	International Subrack Interface Standard
ISLSWG	International Space Life Sciences Working Group
ISPR	International Standard Payload Rack
ISS	International Space Station
ITA	Integrated Truss Assembly
ITS	Integrated Truss Segment
JAR-FCL	Joint Aviation Requirements Flight Crew License
JAXA	Japan Aerospace Exploration Agency
JEF	Japanese External Facility
JEM	Japanese Experiment Module
JMMT	Joint Mission Management Team
JPEG	Joint Photographic Experts Group
LAN	Local Area Network
LDC	Large Diameter Centrifuge
LDR	Low Data Rate
LEO	Low Earth Orbit
LVLH	Local Vertical/Local Horizontal
MAMS	Microgravity Acceleration Measurement System
MAP	Microgravity Applications Projects
MARES	Muscle Atrophy Research and Exercise System
MARS	Microgravity Advanced Research and Support Center
MASER	MATERIAL Science Experiment Rocket

MASM	MAser Service Module
MAXI	Monitor of All-sky X-ray Image
MDL	Mid Deck Locker
MEDES	Institut de Médecine et de Physiologie Spatiales
MEDET	Materials Exposure and Degradation Experiment
MEEMM	Multi-Electrode Electroencephalography Measurement Module
MELFI	Minus Eighty (Degrees Celsius) Laboratory Freezer for ISS
MFC	Microgravity Facilities for Columbus
MGDB	MicroGravity DataBase
MidiCAR	Medium-sized Centrifuge for Acceleration Research
MICAST	Microstructure Formation in Casting of Technical Alloys under Diffusive and Magnetically Controlled Convective Conditions
MIM	Microgravity Isolation Mount
MLI	Multi-Layer Insulation
MLM	Multipurpose Laboratory Module
MMOD	MicroMeteoroid and Orbital Debris
MORABA	Mobile Rocket Base
MOU	Memorandum Of Understanding
MPCC	Multi Purpose Communication and Computer
MPL	Multi-crew Pilot License
MPLM	Multi Purpose Logistics Module
MRM	Mini Research Module
MSG	Microgravity Science Glovebox
MSISE	Mass Spectrometer Incoherent Scatter Model of the Upper Atmosphere
MSL	Materials Science Laboratory
MSM	Monthly Status Meeting
MSP	Mechanism Support Plate
MSRR	Materials Science Research Rack
MSS	Mobile Servicing System
MUSC	Microgravity User Support Center
MVIS	Microgravity Vibration Isolation Subsystem
N <sub>2</sub>	Nitrogen
NASA	National Aeronautics and Space Administration
NASDA	National Space Development Agency of Japan
NET	Not Earlier Than
NIZEMI	Niedergeschwindigkeits ZEntrifugen Mikroskop
NSTS	National Space Transportation System
NTSC	National Television System Committee
N-USOC	Norwegian User Support and Operations Centre
O <sub>2</sub>	Oxygen
OLR	Outgoing Long-wave Radiation
OOS	On-orbit Operations Summary
ORR	Operations Readiness Review
ORU	Orbit Replaceable Unit
OSIC	Organics under Simulated Interstellar Conditions
OSTP	Onboard Short-Term Plan
PA	Product Assurance
PAL	Phase Alternating Line

PaRIS	Passive Rack Isolation System
PB	Programme Board
PCI	Peripheral Component Interconnect
PCM	Pulse Coded Modulation
PCRF	Protein Crystallisation Research Facility
PCSA	Principal Component Spectral Analysis
PDC	Payload Data Centre
PDR	Preliminary Design Review
PDU	Power Distribution Unit
PFS	Pulmonary Function System
PhD	Doctor of Philosophy
PIM	Payload Integration Manager
PIMS	Principal Investigator Microgravity Services
PIV	Particle Image Velocimetry
PK-4	Plasma Kristall-4 experiment
PM	Pressurised Module
PMA	Pressurised Mating Adapter
PMM	Permanent Multipurpose Module
PNG	Portable Network Graphics
PODF	Payload Operations Data File
POIC	Payload Operations Integration Centre
PP	Planning Period
PPD	Payload Procedures and Displays
PPFS	Portable Pulmonary Function System
PPL	Private Pilot License
PS	Physical Sciences, Pressurised Section
PSD	Power Spectral Density
PVC	Poly Vinyl Chloride
PXI	Peripheral Component Interconnect (PCI) eXtensions for Instrumentation
QTH	Quasi-steady Three dimensional Histogram
R3DE	Radiation Risks Radiometer-Dosimeter R3D
R&D	Research and Development
RADEF	RADIation Effects Facility
RB	Radiation Belt
RC	Refrigerated Centrifuge
RCS	Rate Control System
REP	Relativistic Electrons (blue) Precipitations
REXUS/BEXUS	Rocket and Balloon EXperiments for University Students
RF	Radio Frequency
RFU	Radio Frequency (RF) Unit
RKA	Russian Federal Space Agency (now Roscosmos)
RMS	Remote Manipulator System, root-mean-square
ROS	Russian Orbital Segment
Roscosmos	Russian Federal Space Agency
RR	Requirements Review
RS-232	Recommend Standard 232
RT	Room Temperature
RWS	Robotic Work Station

SAA	South Atlantic Anomaly
SAMS	Space Acceleration Measurement System
SCOF	Solution Crystallisation Observation Facility
SDP	Safety Data Package
SEDA/AP	Space Environment Data Acquisition equipment/Attached Payload
SEE	Single Event Effects
SETA	Solidification along an Eutectic path in Ternary Alloys
SFINCSS	Simulation of the Flight of the INternational Crew on Space Station
SIS-18	Schwer Ionen Synchrotron (large ring accelerator for heavy ion research)
SLAMMD	Space Linear Acceleration Mass Measurement Device
SM	Service Module
SME	Small and Medium sized Enterprises
SMILES	Superconducting subMillimeter-wave Limb-Emission Sounder
SMT	Sider Metro Test
SNSB	Swedish National Space Board
SORR	Stage Operations Readiness Review
SPCF	Solution Protein Crystal Growth Facility
SPDM	Special Purpose Dextrous Manipulator
SPHERES	Synchronised Position Hold, Engage, Reorient Experimental Satellites
SPLs	Sound Pressure Levels
SRM	Scientific Reference Model
SSC	Swedish Space Corporation
SSCC	Space Station Control Centre
SSRMS	Space Station Remote Manipulator System
STP	Short-Term Plan
STS	Space Transportation System
SUP	Standard Utility Panel
TBC	To Be Confirmed
TBD	To Be Determined
TEXUS	Technologische EXperimente Unter Schwerelosigkeit
TIFF	Tagged Image File Format
TM/TC	Telemetry/Telecommand
TMA	Transport Modified Anthropometric
TNO	the Netherlands Organisation for Applied Scientific Research
TO	Take-Off
TSM	Sounding Rocket Service Module
TTU	Telemetry and Tracking Unit
TV	Television
UHB	User Home Base
UIB	Utilisation Implementation Board
UK	United Kingdom
ULC	Unpressurised Logistics Carrier
ULF	Utilization and Logistics Flight
UNILAC	UNiversal Linear ACcelerator
URL	Uniform Resource Locator
US	United States
USA	United States of America
USOC	User Support and Operations Centre

USOS	United States On-orbit Segment
UV	Ultraviolet
VCR	Video Cassette Recorder
VDC	Volts of Direct Current
VESSEL-ID	Vessel IDentification System
VSBS	Veículo de Sondagem Booster (Booster Sounding Vehicle)
WAICO	Waving and Coiling of Arabidopsis Roots at Different g-levels
WLP	Weekly Look-ahead Plan
WORF	Window Observational Research Facility
WP	Work Package
XPOP	X-Perpendicular Out of Plane
XVV	X-axis in the Velocity Vector
YVV	Y-axis in the Velocity Vector
ZARM	Zentrum für Angewandte Raumfahrt Microgravitation
ZARM-FAB	Zentrum für Angewandte Raumfahrt Microgravitation – Fallturm Bremen