

GLOSSARY OF ACRONYMS

volumes 1 through 7

CASSINI FINAL MISSION REPORT 2019

Attachment A

1

Glossary of Acronyms and Definitions

A/D Analog-to-Digital

AACS Attitude and Articulation Control Subsystem

AAN Automatic Alarm Notification

AB Approved By

ABS timed Absolute Timed

AC Acoustics

AC Alternating Current

ACC Accelerometer

ACCE Accelerometer Electronics

ACCH Accelerometer Head

ACE Aerospace Communications & Information Expertise

ACE Aerospace Control Environment

ACE Air Coordination Element
ACE Attitude Control Electronics
ACI Accelerometer Interface

ACME Antenna Calibration and Measurement Equipment

ACP Aerosol Collector Pyrolyzer
ACS Attitude Control Subsystem

ACT Actuator

ACT Automated Command Tracker

ACTS Advanced Communications Technology Satellite

AD Applicable Document

ADAS AWVR Data Acquisition Software

ADC Analog-to-Digital Converter
ADP Automatic Data Processing

AE Activation Energy

AEB Agência Espacial Brasileira (Brazilian Space Agency)

AF Air Force

AFC AACS Flight Computer

AFETR Air Force Eastern Test Range

AFETRM Air Force Eastern Test Range Manual

2

AFS Atomic Frequency Standard
AFT Abbreviated Functional Test
AFT Allowable Flight Temperature

AFS Andrew File System

AGC Automatic Gain Control

AGU American Geophysical Union

AHSE Assembly, Handling, & Support Equipment

AIT Assembly, Integration & Test

AIV Assembly, Integration & Verification

AKR Auroral Kilometric Radiation

AL Agreement Letter

AL Aluminum

AL Anomalously Large
ALAP As Low As Practical

ALARA As Low As Reasonably Achievable

ALB Automated Link Builder

ALD Assistant Laboratory Director

ALF Assisted Load Format

ALMA Atacama Large Millimeter/submillimeter Array

ALT Altimeter
AM Americium

AM Articulation Mechanism

AMC Advanced Media Calibration

AMMOS Advanced Multi-Mission Operations System

AMNH American Museum of Natural History

AMO Air Mass Zero

AMS Antenna Microwave Subsystem

AMTEC Alkali Metal Thermoelectric Converter

amu atomic mass unit

ANT Antenna

AO Announcement of Opportunity

AOS Acquisition of Signal

AP Action Program
AP Activity Plan

AP Auxiliary Propulsion

APA Antenna Pointing Assembly

APDTP Archive Policy and Data Transfer Plan

APF Activity Plan File

APGEN Activity Plan Generator

APID Application Processing Identification

APL Applied Physics Lab
APL Approved Parts List

APN Administrative Practices Notebook

APP Automated Picture Planning
APS Airborne Purge Subsystem

APSA Advanced Photovoltaic Solar Array

APSD Archive Plan for Science Data (formerly known as APDTP)

APU Auxiliary Power Unit

AQS Acquisition Sun Sensor

AR Anomaly Report

ARA Area Routing Assembly
ARC Ames Research Center

ARIA Advanced Range Instrumentation Aircraft

ARPC Ascending Ring Plane Crossing

ARR Array

ARRAY R Array Reference
ARRAY S Array Slave

ARWM Articulated Reaction Wheel Mechanism

ASA Austrian Space Agency
ASAP as soon as possible

ASCII American Standard Code for Information Interchange

AS Airborne Support Equipment

ASI Agenzia Spaziale Italiana (Italian Space Agency)

ASI Atmospheric Structure Instrument

ASIC Application-Specific Integrated Circuit

ASME American Society of Mechanical Engineers

ASP Automated Sequence Process

Assy Assembly

ASTM American Society for Testing and Materials

ASZCAN Aszmuthal Scan

ATC Autonomous Temperature/Thermal Control
ATCA Australian Telescope Compact Array Narrabri

ATDF Archival Tracking Data File

ATLO Assembly, Test, and Launch Operations

ATM Atmospheres Node
ATMOS Atmospheres Node

ATNF Australian Telescope National Facility
ATP Acceptance Test Procedure/Plan

AU Astronomical Unit

Autorad Automatic Command Radiation

AUX, OSC Auxiliary oscillator

AUXPIM Auxiliary Oscillator Characterization Periodic Instrument Maintenance

AWG American Wire Gauge
AWS Amazon Web Services

AWVR Advanced Water Vapor Radiometer

Az Azimuth

AZSCAN Azimuth Scan

В

-BU -backup (used appended to the maneuver name)

B Billions
B/S Boresight
Ba Barium

BA Bus Adapter

BAIL Backup/ Backdoor ALF Injection Loader

BAQ Block Adaptive Quantizer

BAT Bus Analyzer Tool

BATS-R-US Block Adaptive Tree Solar-Wind Roe Upwind Scheme

BAU Bus Arbitration Unit

BB Basebody
BB Bread Board
BC Bus Controller

BCA Battery Control Assembly

BCE Bench Checkout Equipment

BCIOU Bus Controller Input Output Unit

BCM Bus Control Manager

BCR Baseline Confirmation Review

BCRTM Bus Controller, Remote Terminal, Monitor

BCSS Back Cover Subsystem

BD Burst Disc

BDS Bulk Data Storage

BEB Binary-Encounter-Bethe

BER Bit Error Rate

BIH Bureau International de l'Heure

BIRA Belgisch Instituut voor Ruimte-Aëronomie (Belgian Institute for Space Aeronomy)

BIT Built-In Test

BIU Bus Interface Unit bKOM Broadband Kilometer

BMON Bus Monitor

BNSC British National Space Centre

BOB Bang-Off-Bang
BOB Breakout Box

BOD Beneficial Occupancy Date

BOE Boresight-Off-Earth
BOL Beginning of Life
BOM Beginning of Mission
BOT Beginning of Track

BPF Band Pass Filter

BPLV Bipropellant Latch Valve

BPLVD Bipropellant Latch Valve Driver

BPR Back-Pressure Relief

BPS Bits Per Second
BRF Band Reject Filter

BSIM Bus Simulator

BSPT Bipropellant System Performance Tool

BSR Bistatic Radar

BTA Bipropellant Tank Assembly

BTK Block for Transfer and Correction

BTU British Thermal Unit

BURPT Brad's Update Required Prediction Tool

BUTT Brad's Update Targeting Tester (Science Planning tool)

BVE Block V Exciter
BVR Block V Receiver
BVT Body Vector Table
BWG Beam Wave Guide

С

C/A Closest Approach

C/C CRAF/Cassini

C/CAM Collision and Contamination Avoidance Maneuver

C/O Check Out

CA Chemical Analyzer
CA Closest Approach
CAA Correcting Agency
CABL Cabling Subsystem

CAD Computer-Aided Design

CAE Computer Aided Engineering

CAIP Constraint_Avoidance_In_Progress

CAKE Cassini Apoapses for Kronian Exploration

CAL Calibrated or Calibration

Caltech California Institute of Technology
CAM Collision Avoidance Maneuver
CAM Command Approval Meeting
CAPS Cassini Plasma Spectrometer

CAPTRAN Macro Validation Tool
CAR Cassini Activity Request

CAR Command Ambiguity Resolver

CAS Computer Aided Software
CASSIE Cassini Internet Explorer
CASTL Cassini Technical Library
CAT Chemical Analyzer Target

CAT/MAT Cassini Adaptation Team/Multi Mission Adaptation Team

CATS Cassini AACS Test Station

CB Concurred By

CBE Current Best Estimate
CBH Catalyst Bed Heater

CBL Cabling

CC Cargo Container

CCA Change Control Authority

CCAFS Cape Canaveral Air Force Station

CCB Change Control Board

CCB Configuration Control Board
CCD Change Coupled Device
CCD Charge Coupled Device

CCDS Charge Coupled Device Standards

CCE Camera Control Electronics

CCL Channel Conversation Language

CCPOCC CRAF/Cassini Payload Operations Control Center

CCR Configuration Change Request

CCSDS Consultative Committee for Space Data Systems

CCT Central Communications Terminal

CCW Counter-Clockwise

CD Compact Disc

CDA Cosmic Dust Analyzer

CDAP Cassini Data Analysis Program

CDB Central Data Base

CDEA Command and Data Electronics Assembly

CDF Cumulative Distribution Function

CDL Command Data Language

CDMS Command & Data Management System

CDR Channel Data Record
CDR Critical Design Review

CD-ROM Compact Disc-Read Only Memory

CDRS Cassini Downlink and Reconciliation Subsystem

CDS Circuit Data Sheet

CDS Command & Data Subsystem

CDSCC Canberra Deep Space Communications Complex

CDSS Command & Data Subsystem Simulator

CDS-SE Command & Data Subsystem-Support Equipment

CDT Cassini Design Team

CDU Command Demodulation Unit

CDU Command Detector Unit

CE Cognizant Engineer

CE Critical Enable

CEA CIRS Electronics Assembly

CEC Co-rotation Enforcement Currents

CEL Cassini Electronic Library

CELV Complementary Expendable Launch Vehicle

CEM Channel Electron Multipliers

CEM Cassini Equinox Mission

CEQ Council on Environmental Quality

CER Co-rotation Eccentricity Resonance

CERR Critical Event Risk Review

CESR Centre d'Etudes Spatiales des Rayonnements (Space Studies Center of

Radiation, France)

CETP Centre d'Etudes des Environnements Terrestre et Planétaires (Center for the

Study of Terrestrial and Planetary Environments, France)

CEU Central Electronics Unit

CG Center of Gravity

CGS Cassini Ground System
CHA Camera Head Assembly

CHARM Cassini Huygens Analysis and Results of the Mission

CHDO Compressed Header Data Object
CHEMS Change-Energy-Mass Spectrometer

CHPIP Cassini/Huygens Project Implementation Plan

CI Cage Instability
CI Configuration Item

CIA Collision-Induced Absorption

CICLOPS Cassini Imaging Central Laboratory for Operations

CIDEX Cometary Ice and Dust experiment

CIFP CDS Internal Fault Protection

CIMS Cassini Information Management System

CIR Co-rotation Interaction Region

CIRS Composite Infrared Spectrometer

CISO Computing and Information Services Office

CIT California Institute of Technology

CIU Control Interface Unit

CK SPICE Spacecraft Orientation Data Kernel

CKT Circuit

CL Communication Line

CLCW Command Link Control Work
CLTU Command Link Transfer Unit

CM Center of Mass
CM Central Meridian
CM Circulation Model

CM Configuration Management

Cm-244 Curium-244

CMC Centralized Monitor and Control

Cmd Command

CME Configuration Management Engineer

CME Coronal Mass Ejections

CMI Cyclotron Maser Instability

CMOS Complementary Metal Oxide Semiconductor

CMP Configuration Management Plan

CMR Configuration Management Requirements

CMT Constraint Monitor Table

CNES Centre National d'Etudes Spatiales (National Centre for Space Studies, France)

CNR Consiglio Nazionale delle Ricerche (National Research Council, Italy)

CNRS Centre National de la Recherche Scientifique (National Center for Scientific

Research, France)

CNSA China National Space Administration

CO Carbon Monoxide
CO Cassini Orbiter

Co Cobalt

CO.RI.S.T.A Consortium of Research on Advanced Remote Sensing Systems

COBE Cosmic Background Explorer

CODACON Coded Anode Converter

CODMAC Committee on Data Management and Computation

Cog E Cognizant Engineer
Co-I Co-Investigator
COIN Coincidence Plate

COMA Cometary Matter Analyzer
Comm Svc Communication Services
COMPARE File Comparison Software

COMPLEX Committee on Planetary and Lunar Exploration

CONAE Comisión Nacional de Actividades Espaciales (National Space Activities

Commission, Argentina)

CONF Confirmation

COP Command Operation Procedure

CORE Cassini Operations Reference Encyclopedia

COS Common Operating System

Cos Cosine

COTS Commercial Off-The-Shelf

COV Covariance

COVT Cassini Observation Verification Tool

CP Cassini Project

CPC Compound Parabolic Concentrator
CPCI Computer Program Configuration Item

CPD Cassini Proposals Due
CPF Cognos Project File
CPF Command Packet File

CPMS Cassini Propulsion Module Subsystem

CPT Channel Parameter Table
CPU Central Processing Unit
CR Concentration Ratio

CRAF Comet Rendezvous/Asteroid Flyby
CRAND Cosmic Ray Albedo Neutron Decay

CRC Critical Register Control
CRC CIMS Resource Checker

CREWE Coordinated Radio Electron and Waves Experiment

CRF Command Request Form

CRG Coherent Reference Generator

CRIMS Cometary Retarding Ion Mass Spectrometer

CS Closed Source

CSA Canadian Space Agency
CSA Charge Sensitive Amplifier

CSAS Cassini Spacecraft Analysis Subsystem
CSCI Computer Software Configuration Item
CSET Cassini System Engineering Team

CSI Control-Structure Interactions

CSIRO Commonwealth Scientific and Industrial Research Organisation (Australia)

CSM Cassini Solstice Mission
CSN Closed Source Neutral

CSO Compensated Sapphire Oscillator

CSOC Consolidated Space Operations Contract

CSR Customer Service Rep

CSRRD Cross-Systems Requirements Reference Document

CSS Coarse Sun Sensor

CSWG Campaign Science Working Group

CTA Compatibility Test Area

CTR Cognizant Technical Representative
CTS Communications Technology Satellite

CTT Compatibility Test Trailer
CTU Control and Timing Unit
CTV Cassini Turn Visualizer

CU Control Unit

CUCA Chirp Upconverter and Amplifier

CUL Clean-Up Loop

CUP CIMS Uplink Process

CV Control Voltage

CW Clockwise

CW Constant/Continuous Wave

D

∇DOR Delta-Differenced One-way Ranging

ΔV Delta V
D Darmstadt

D Draft

D&CS Data and Computing Services

D(CDS) Deferred CDS

D/H Deuterium to Hydrogen

D/L Downlink

DA Direct Access

DA Double Amplitude

DA Dust Analyzer

Da Daltons

DAC Digital-to-Analog Converter

DAM Decametric

DARA Deutsche Agentur Für Raumfahrtangelegenheiten (German Agency for Space

Affairs)

DASIAC Defense Atomic Support Information Analysis Center

DAU Direct Access Unit

DB Data Buffer
DB Deadband
dB Decibel

DBA Data Bus Adapter

dBc Decibels below carrier

DBE Double-Bit Error

DBMS Data Base Management System

DC Direct Current

DCG Digital Chirp Generator

DCM Delivery Coordination Meeting

DCN Document Change Notice

DCO Data Cut-Off

DCO Digitally Controlled Oscillator
DCP Data Compression Processor
DCS Data and Computing Services

DCSS Descent Control System

DCT Discrete Cosine Transform

DDA Dual Drive Actuator

DDE Displacement Damage Effect

DDOR Delta Differential One-Way Ranging

DDOSO DSN Development, Operations, and Services Program Office

DDR DSMS Delivery Review

DEF Displacement Equivalent Fluence

Delta-V Velocity Increment

DESATS Desaturation

DESP Department of Space Environment (France)

DEV Devices Subsystem
DF Dissipation Factor

DFPW Downlink Fields Particles and Waves

DFPWTCM Downlink Fields, Particles and Waves Trajectory Correction Maneuver

DFTS Dual-Fault-Tolerant Switch

DGDS Downlink Ground Data System

DGS Downlink Ground System

DI Dielectrically Isolated

DIF Dipartimento Interateneo di Fisica (Interuniversity Department of Physics, Italy)

DIFP Differential Ion Flux Probe

DIO Distributed Instrument Operations
DIPS Dynamic Isotope Power System

DISR Descent Imager and Spectral Radiometer

Div Division

DKF DSN Keyword File

DL Downlink

DLF Downlink Frequency
DLIB Document Library

DLR Deutsches Zentrum für Luft- und Raumfahrt (German Aerospace Centre)

DLWG Downlink Working Group
DMA Direct Memory Access
DMD Data Monitor and Display

DMR Detailed Mission Requirements

DMSP Defense Meteorological Satellite Program

DMT Data Management Team

DMWF Desired Memory Word File

DN Data Number
DN Digital Number
DN Discipline Nod

DO Distributed Operations

DoD Department of Defense

DOD Depth of Discharge

DOD Differential One-Way Doppler

DoE Department of Energy dof Degree of Freedom

DOI Distributed Operations Interface

DOM Distributed Object Manager

DOP Dioctylpthalate

DOR Differenced One-way Ranging
DOT Department of Transportation

DOY Day of Year
DP Direct Program

DPA Destructive Physical Analysis

DPA Dipole Assembly

DPFR Developmental Problem Failure Report

DPS Division of Planetary Sciences
DPTRAJ Double Precision Trajectory

DPU Data Processing Unit

DR Data Record

DR Discrepancy Report

DRAM Dynamic Random Access Memory

DRC Danmarks Rumcenter (Danish National Space Center)

DRD Data Requirements Description
DRPC Descending Ring Plane Crossing

DRVID Differenced Range Versus Integrated Doppler

DSA Development Support Area

DSA Digital Synchronization Assembly

DSCAL Deep Space Calibration

DSCC Deep Space Communications Complex

DSIT Data Systems Integration Team

DSM Deep Space Maneuver

DSMC Direct Simulation Monte Carlo
DSMS Deep Space Mission System

DSN Deep Space Network

DSNMONCAL DSN Monopulse Calibration

DSNOT Deep Space Network Operations Team

DSOC Deep Space Operations Center
DSOT Data Systems Operations Team

DSP Dual Shearplate

DSP-R Digital Signal Processor-Recorder
DSRI Danish Space Research Institute

DSS Deep Space Station
DSS Digital Subsystem

DST Deep Space Transponder

DTF Development and Test Facility

DTL Drag Torque Limiter

DTM Developmental Digital Test Model

DTM Digital Terrain Model

DTM Dynamics Test Model

DTR Digital Tape Recorder

DTS Dead Time Start
DTSTART Dead Time Start

DTT Downlink Tracking and Telemetry
DUCT Downlink/Uplink Coherency Tool
DUET Data Utilization Efficiency Tool

DUT Device Under Test

DV Data Volume

DV-EGA Delta-V Earth Gravity Assist

DWE Doppler Wind Experiment

DWG Discipline Working Group

DWGC Discipline Working Group Chairperson

DX	Diplexer		
E			
E/Q	Energy per Charge		
EA	Electronics Assembly		
EA	Energy Activation		
EAC	Extended Action Command		
EAR	Engineering Activities Review		
EAR	Export Administration Regulations		
EAROM	Electronically Alterable Read Only Memory		
EBS	EGSE Basic Software		
ECB	Energy-Cutoff Burn		
ECC	Emergency Command Center		
ECH	Electron Cyclotron Harmonic		
ECI	Engineering Change Instruction		
ECM	Engineering Change Management		
ECO	Engineering Change Office		
ECR	Engineering Change Request		
eCRF	Electronic Command Request Form		
EDAC	Error Detection and Correction		
EDF	Engineering Data File		
EDF	Experiment Data File		
EDMG	Engineering Data Management Group		
EDMS	Engineering Data Management System		
EDR	Experiment Data Record		
EDT	Engineering Flight Computer Diagnostic Tester		
EED	Electro Explosive Device		
EEE	Electronic, Electrical & Electromechanical		
EEIS	End-to-End Information System		
EFC	Electronic File Cabinet		
EFC	Engineering Flight Computer		
EFCSE	Engineering Flight Computer Support Equipment		
EFL	Effective Focal Length		
EFP	Explosively Formed Projectile		
EG	Entrance Grid		

EGA Earth Gravity Assist

EGA Engine Gimbal Actuator

EGAP Engine Gimbal Actuator P

EGE Engine Gimbal Electronics

EGECU Engine Gimbal Electronics Control Units

EGED Engine Gimbal Electronics Driver

EGSE Electrical Ground Support Equipment

EGSE Engineering Ground Support Equipment

EH External Harness

EHD Elasto-Hydro-Dynamic

EICD Electrical Interface Control Drawing
EID Experiment Interface Document

EIFOV Effective Instantaneous Field of View

EIP Experiment Implementation Plan
EIS Environmental Impact Statement

EISSS Environmental Impact Statement Supporting Studies

EJGA Earth Jupiter Gravity Assist

EK Events Kernel

EKB Extended Kalman-Bucy

El Elevation

ELF Extremely Low Frequency

ELM Electronic Mail

ELS Eastern Launch Site
ELS Electron Spectrometer

Electron operationator

ELV Expendable Launch Vehicle

EM Electromagnetic

EM Electron Multiplier

EM Engineering Model

EM Extended Mission

EMC Electromagnetic Compatibility

EMF Electromagnetic Force

EMI Electromagnetic Interference

EMI/RFI Electromagnetic Interference/Radio Frequency Interference

EMTB Engineering Model Test Bed

EN Engineering Node

ENA Enable

ENA Energetic Neutral Analyzer
ENA Energetic Neutral Atom
ENG D/L Engineering Downlink

Engr Engineering
EOL End-of-Life

EOLE End-of-Life Effect
EOM End of Mission
EOP End of Project
EOP End-of-Propellant
EOS Equation of State

EOS-AM Earth Observing System-Morning
EPC Electronic Power Conditioner
EPD Energetic Particle Detector

EPDC Electrical Power Distribution Circuitry

EPO Education and Public Outreach

EPP & RD Environmental Program Policy and Requirements Document

EPS Earth-Probe-Sun

EPS Electronics Packaging Subsystem

EPSS Electrical Power Subsystem

EPU Event Processor Unit

ER Eastern Range

ERE Environmental Requirements Engineer

erfc Error Function

ERRCE Excessive RWA Rate Control Error

ERT Earth Receive Time
ESA Electrostatic Analyzer
ESA European Space Agency

ESA Explosive Safe Area

ESB Earth Swing-by

ESD Electrostatic Discharge

ESDU Engineering Flight Computer Software Developmental Unit

ESMC Eastern Space and Missile Center

ESMCR Eastern Space and Missile Center Regulation

ESOC ESA Operations Center

ESOC European Space Agency Operations Center (Darmstadt, Germany)

ESR Effective Series Resistance ESS Energy Storage Subsystem

ESTEC European Space Technology and Research Center

ET Eastern Time

ETA Environmental Test Authorization
ETAF Environmental Test Authorization
ETC Excessive Thruster Commanding

ETL Environmental Test Labs

ETM Element Technical Manager

ETR Eastern Test Range
ETR Equivalent Time Ratio

ETSS Environmental Test Specification Summary

EU Engineering Unit

EURECA European Retrievable Carrier

EUS Energia Upper Stage
EUV Extreme Ultraviolet

eV Electron Volt

EVA Extra Vehicular Activity

EVEEGA Earth-Venus-Earth-Earth Gravity Assist

Ext External

F

F Final
F Fluorine
F/W Firmware

FA Flight Acceptance
FA Formal Agreement

FAB Fabrication
FAC Facility

FAC Field Aligned Current

FAP Frequently Acronym Phrase
FAR Flight Acceptance Review

FARM Frame Acceptance and Reporting Mechanism

FASTSIM High-speed Simulator

FC Faraday Cage

FCB Facility Control Building
FCU Flight Computer Unit

FDD Functional Design Document

FDS Fine Digital Sun Sensor

FDU Fault Detection Unit

FEC Forward Error Correction
FEE Front-End Electronics

FEI File Exchange Interface
FEM Finite Element Model

FEN Field-Equivalent-Noise

FEOT Facility Experiment Operations Team

FET Field Effect Transistor

FFT Fast Fourier Transform

FG Frequency Generator

FGM Fluxgate Magnetometer

FH Filter Hybrid

FHDF Flight Hardware Development Facility

FI Facility Instrument
FIFO First In/First Out

FIM Facility Instrument Manager

FIR Far Infrared

FIRDR Final Interface Requirements and Design Review

FIS Flight Instrument System

FIST Facility Instrument Science Team

FIT Flight Investigation Team

FK Frames Kernel

FLA Four/Five Letter Acronym

FLT Flight

FLT-SP Flight-Spare FM Flight Model

FM Frequency Modulation

FMEA Failure Mode Effects Analysis

FMECA Failure Mode Effects & Criticality Analysis

FMH Free Molecular Heating

FO Flight Observable

FOM Figure of Merit

FOP Flight Operations Plan

FORP Fuel-Oxidizer Reaction Products

FORS Fiber Optic Rotation Sensor

FOS Factor of Safety
FOV Field of View
FP Fault Protection
FP Flight Project
FP Focal Plane

FPA Focal Plane Array

FPA Focal Plane Assembly

FPGA Field Programmable Gate Array

FPO Flight Projects Office

FPP Fields and Particles Pallet

FPP Flight Project Practice

FPR Flight Performance Reserve

FPSG & R Flight Projects Safety Guide and Requirements

FPSO Flight Project Support Office
FPW Fields, Particles, and Waves
FPWI Fields/Particles/Waves INMS

FR Failure Report
FR Flight Rule

FR Functional Requirements/Review
FRD Functional Requirement Document

FRF File Release Form

FRG Federal Republic of Germany
FRPO F-ring and Proximal Orbit

FRR Functional Readiness Review

FRSS Front Shield Subsystem

FS Flight System

FSAR Final Safety Analysis Report

FSDS Flight Software Development System

FSIV Final Sequence Integration and Validation

FSO Flight System Operations

FSSE Flight Software Sustaining Engineering

FST Facility Science Team
FSTB Flight Software Test Bed

FSW Flight Software

FTA Fault Tree Analysis

FTECS Fundamental Technologies
FTS Flight Termination System

FtS Follow the Sun

FTS Fourier Transform Spectrometer
FTS Frequency and Timing Subsystem

FU Flight Unit

FUSE Far Ultraviolet Spectroscopic Explorer

FUV Far Ultraviolet

FWHM Full Width at Half Maximum

FY Fiscal Year

G34 Goldstone 34 Meter Antenna

G70 Goldstone 70 Meter Antenna
G&C Guidelines and Constraints

GaAlA Gallium-Aluminum-Arsenide

GaA Gallium Arsenide

GC Gas Chromatographic

GCF Ground Communications Facility

GCM General Circulation Model
GCM Global Circulation Model

GCMD Ground Command

GCMS Gas Chromatograph Mass Spectrometer

GCR Galactic Cosmic Ray

gd Gadolinium

GDD General Design Document

GDF Globally Distributed Flux

GDS Ground Data System

GDSCC Goldstone Deep Space Communications Complex

GDSE Ground Data System Engineer

Ge Germanium
GEO Geosciences
GF Grand Finale

GFE Government Furnished Equipment

GFO Grand Finale Orbits

GFP Government Furnished Property

GFSWG Grand Finale Sharing Working Group

GHE Gaseous Helium

GHz Gigahertz

GIF GCF Interface

GISS Goddard Institute for Space Studies

GL & Cs Guidelines and Constraints

GLL Galileo

GM Gravitational Mass

GMB Ground Movable Block
GMT Greenwich Mean Time

GN&C Guidance, Navigation, and Control

GN₂ Gaseous Nitrogen GOB Group of Blocks

GPHS General Purpose Heat Source
GPIB General Purpose Interface Bus

GPS Global Positioning System

GR General Relativity

GRA GPS Receiver/Processor Assembly

GRS Gamma Ray Spectrometer

GRS Great Red Spot GS Ground System

GSCCB Ground System Change Control Board

GSCM Ground System Configuration Management

GSDM Ground System Development Manager

GSE Geocentric Solar Ecliptic

GSE Government Supplied Equipment
GSE Gravity Science Enhancement
GSE Ground Support Equipment
GSFC Goddard Space Flight Center

GSM Gravity Science Enhancement

GSO Geo-Stationary Orbit

GSOM Ground System Operations Manager

GSR Ground System Readiness

GSRR Ground System Readiness Review
GSSE Ground Software System Engineer

GSW Ground Software

GUI Graphical User Interface

GVSC Generic VHSIC Spaceborne Computer

GW Gravitational Wave

GWE Gravitational Wave Experiment

GWE Gravity Wave Experiment

GWS Great White Spot

Н

h Hexadecimal

h Hour

H/S Hardware/Software

H/W Hardware

HAARP High-frequency Active Auroral Research Program

HASI Huygens Atmospheric Structure Instrument

HASI-PWA Huygens Atmospheric Structure Instrument-Permittivity, Wave, and Altimetry

HCD Hardware Command Decoder

HCN Hydrogen Cyanide

HCP Hardware Command Program

HCS High-speed CMOS Silicon/Sapphire
HDAC Hydrogen Deuterium Absorption Cell

HDB Huygens Data Base

HDC Hardware Command Decoder

HDR Hardware Design Review

He Helium

HEF High Efficiency

HeLV Helium Latch Valve

HeLVD Helium Latch Valve Driver

HeLVD Helium Pressurant Latch Valve Drivers
HeLVDA Helium Latch Valve Driver Assembly

HEMT High Electron Mobility Transistor

HEO High Earth Orbit

HEXFET Hexagonal Field Effect Transistor

HFR High Frequency Receiver

hFE Hybrid Parameter Forward Current Gain Common Emitter

HGA High-Gain Antenna

HGA2RAM High-Gain Antenna (HGA) to the dust RAM direction

HGAS High-Gain Antenna Swap

HK Housekeeping
HL High Level

HMCS Huygens Monitor and Control System

HMOC High Mass Organic Cation

HOL High Order Language

HOM Hectometric

HP Hewlett-PackardHP High PressureHP Huygens Probe

HPA High-Power Amplifier
HPD Hot Plasma Detector

HPF Hazardous Processing Facility
HPLV High Pressure Latch Valve

HPOC Huygens Probe Operations Center

HPSP High Precision Scan Platform

HQ Headquarters
HR High Rail

HRCR Hardware Requirements and Certification Review

HRD High Rate Detector
HRP High-Rate Processor

HRTF Huygens Recovery Task Force

H-S SIM High-Speed Simulator
HSP High Speed Photometer

HSPD Homeland Security Presidential Directive

HSR Hardware Safety Review
HSS High Speed Simulator
HST Hubble Space Telescope

HSWT Huygens Science Working Team

HTA Helium Tank Assembly

HTR Heater

HUY Huygens Probe
HV High Voltage

HVPS High Voltage Power Supply

HVU High Voltage Unit

HW Hardware

HWHM Half-Width-Half-Maximum

Hz Hertz

ı

I&T Integration and Test

I/F Interface
I/O Input/Output

I/P Input

IA/LP Ion Analyzer/Langmuir Probe
IAA Inter-Agency Agreement

IABS Integrated Apogee Boost System
ICA Inventory Change Authorization Form

IAD Ion-Aided Deposition

IAG International Association of Geodesy

IAR Independent Annual Review

IASF Istituto di Astrofisica Spaziale e Fisica Cosmica (Institute for Space Astrophysics

and Cosmic Physics, Italy)

IAU International Astronomical Union IBEX Interstellar Boundary Explorer

IBIT Impulse Bit

IBS Ion Beam Spectrometer

IC Imperial College

IC Instrument Coordinator

IC Integrated Circuit
IC Internal Combustion

ICA Inventory Change Authorization
ICCB Interface Change Control Board

ICD Interface Control Document
ICD Interface Control Drawing
ICDS Interface Circuit Data Sheet

ICME Interplanetary Coronal Mass Ejection

ICO Instrument Check Out

ICR Instrument Confirmation Review

ICV Inter-Center Vector
ID Interface Document

IDAP Immediate/Delayed Action Program

IDL Interactive Data LanguageIDP Interplanetary Dust ParticlesIDR Intermediate Data Record

IDRSPS Intermediate Data Records Stripper Processing System

IDS Instrument Data System

IDS Interdisciplinary Scientist/Science

IDSRD Investigation Description & Science Requirements Document

IDST Instrument Development Science Team

IDT Instrument Development Team

IDTL Instrument Development Team Leader

IE Instrument Engineer

IEB Instrument Expanded Block

IESD Internal Electrostatic Discharge

IEU Image Emulation Unit
IF Intermediate Frequency

IFC In-flight Calibration
IFM Interface Module

IFOV Instantaneous Field of View

IFRB Interface Failure Review Board

IFSI Istituto di Fisica dello Spazio Interplanetario (Institute for Interplanetary Space

Physics, Italy)

IG Ion-Grid

IGAP Imaging in the Ring Gap
IID Impact Ionization Detector
IIT Impact Ionization Target

IK Instrument Kernel

ILAN Institutional Local Area Network

ILD Interline Delay

ILR Inner Lindblad Resonance

IM Injection Margin

IMF Interplanetary Magnetic Field
 IMG Imaging (Sciences Node)
 IMP Interface Management Plan
 IMP Internal Management Plan
 IMS Ion Mass Spectrometer

INAF Istituto Nazionale di Astrofisica (National Institute for Astrophysics, Italy)

INCA Ion and Neutral Camera

IND Indication

IND Interplanetary Network Directorate (formerly TMOD)

INFOCOM Dipartimento di Scienza e Tecnica dell'Informazione e della Comunicazione

(Department of Science and Technology of Information and Communications,

Italy)

INMS Ion and Neutral Mass Spectrometer

INPE Instituto Nacional de Pesquisas Espaciais (National Institute for Space Research,

Portugal)

InSB Indium Antinomide

Instr Instrument
INT Integration

INTA Instituto Nacional de Técnica Aeroespacial (National Institute of Aerospace

Technology, Spain)

INU Inertial Navigation Unit
IO Instrument Operations

IOI Instrument Operations Input
IOI Instrument Operations Interface

IOM Interoffice Memorandum
ION INMS Operations Network

IORAM Input-Output Read Only Memory

IOS Instrument Operations System

IOU Input/Output Unit

IOWG Instrument Operations Working Group

IP Implementation PlanIP Integration Period

IPSD Interface Planning and Scheduling Document

IPS-Inc. Innovative Productivity Solutions Inc.

IPT Io Plasma Torus

IR Independent Review

IR Infrared

IRR Infrared Radiometer
IR/UV Infrared/Ultraviolet

IRAM Institut de Radio Astronomie Millimétrique (Millimeter Radio Astronomy Institute,

France)

IRD Interface Requirements Document

IRE Inertial Reference Electronics

IRF Institutet för rymdfysik (Institute of Space Physics, Sweden)

IRI Inertial Reference Interface

IRIS Infrared Interferometer Spectrometer

IRR Initial Requirements Review

IRSPS International Research School of Planetary Sciences

IRT Independent Review Team
IRU Inertial Reference Unit

IRUB Inertial Reference Unit B
IS Investigation Scientist

ISA Incident Surprise Anomaly

ISAS Institute of Space and Astronautical Science

ISB Intra System Bus

ISBC Inter-Subassembly Bus Chip

ISD Interstellar Dust

ISE Ion Source Enclosure

30

ISEE International Sun-Earth Explorer

ISFD Integrated Software Functional Design/Diagram

ISFRD Instrument System Functional Requirements Document

ISLR Integrated Sidelobe Ratio

Interstellar Medium ISM

ISMF Interstellar Magnetic Field Frame

ISO International Organization for Standards

ISO Infrared Space Observatory ISOE Integrated Sequence of Events

Isp Specific Impulse

ISRO Indian Space Research Organization

ISS Imaging Science Subsystem

ISSPT Imaging Science Subsystem Pre-commanding Tool

IST Imaging Science Team IST Institutional Support Team IST Integrated System Test ISTS Inner Structure Subsystem ISWG Icy Satellites Working Group

ΙT Integrated Timeline

ΙT Information Technology

ITAR International Traffic in Arms Regulation

ITL Integrated Test Laboratory

ITO Indium Tin Oxide

ITSDB Information Technology Security Database

ITSR Integration and Test Status Review

IUS Inertial Upper Stage IVD **Inertial Vector Definition** IVP Inertial Vector Propagator IVT Interrupt Vector Table

J

JAEA Japan Aerospace Exploration Agency

JFET Junction Field Effect Transistor

JGA Jupiter Gravity Assist JHU Johns Hopkins University

JHU/APL Johns Hopkins University Applied Physics Laboratory

JPEG Joint Photographic Experts Group

JPL Jet Propulsion Laboratory
JSC Johnson Space Center

JSWG Joint Science Working Group
JUNOCam Juno Observing program

JWG Joint Working Group

JWST James Webb Space Telescope

K

K Boltzmann's Constant

Ka-EX Ka-Band Exciter
KaO Ka-Band Downlink
KaT Ka-band Translator
Ka-Tr Ka-Band Translator

Ka-TWTA Ka-Band Traveling Wave Tube Amplifier

KBO Kuiper Belt Object
kbps Kilobits Per Second
KBr Potassium Bromide
keV Kiloelectron Volt
KEX Ka Band Exciter

KFKI Kuratorium für Forschung im Küsteningenieurwesen (Research Institute for

Particle and Nuclear Physics, Hungary)

kg Kilograms kHz Kilohertz km Kilometer

km/sKilometer Per SecondKPTKinematic Prediction ToolKSCKennedy Space Center

L

L Launch

L/V Launch Vehicle
LA Launch Approval

LAMP Lyman-Alpha Mapping Project

LAN Local Area Network

LANL Los Alamos National Laboratory

LASP Laboratory for Atmospheric and Space Physics

LCE Launch Complex Equipment LCP Left-Hand Circularly Polarized

LDAP Lightweight Directory Access Protocol

LED Light-Emitting Diode LEF Linear Electric Field

LEM Lower Equipment Module

LEMMS Low Energy Magnetospheric Measurement Subsystem

LEO Low Earth Orbit

LeRC Lewis Research Center LET Linear Energy Transfer

LF&S Launch Facilities and Support LFE Low Frequency Electronics LFE Low Frequency Extension LFH Low Frequency Harmonics LFR Low Frequency Receiver

Low-Gain Antenna LGA

LHCP Left-Hand Circular Polarization LILT Low Intensity, Low Temperature

LISM Local Interstellar Medium

LIVPUDWG Live Inertial Vector Propogator Update Working Group

LLBL Low-Latitude Boundary Layer

LMB Live Movable Block LNA Low-Noise Amplifier LO Local Oscillator LOS Line-of-Sight LOS Loss of Signal

Langmuir Probe LPL Lunar and Planetary Laboratory

LPLV Low Pressure Latch Valve

LPPP Low Precision Pointing Platform

LPT Linear Prediction Theory LR Launch Recommendation

LR Low Rail

LP

LRD Lightning and Radio Emission Detector

LRO Lunar Reconnaissance Orbiter

LRP Low-Rate Processor

LRR Launch Readiness Review

LS Least-Square

LS8B Least-Significant 8-Bits
LSB Least Significant Bit
LSF Line Spread Function
LSI Large Scale Integrated
LSK Leap Seconds Kernel
LSW Least Significant Word

LT Local Time

LTE Local Thermodynamic Equilibrium

LTL Laser Time Line
LTS Laboratory Test Set
LUB Live Update Block

LUD Live Update

LUT Look-Up Table

LV Latch Valve

LV Launch Vehicle

LV Low-Voltage

LVA Launch Vehicle Adapter

LVCR Launch Vehicle Contingency Reserve

LVDT Linear Variable Differential Transformer

LVDT Linear Variable Displacement Transformer

LVMP Launch Vehicle Mission Peculiar

LVPS Low Voltage Power Supply
LVS Launch Vehicle System

LWRHU Light Weight Radioisotope Heater Unit

М

m/s Meter Per Second

M34 Madrid 34 mA Milli-Amp

MAC Magnetometer Alignment Coil

MAC Mass Acceleration Curve MAG Magnetic Field Investigation

Mag Magnetics

MAG Magnetometer

MAM Mission Assurance Manager

MAP Mission Activity Profile

MAPEX Map Expansion

MAPS Magnetospheres and Plasma Science

MAS Maneuver Automation Software

max Maximum Mb Megabits

MBI Multi-Beam Imaging

MC Map Compiler

MCA Master Clock Assembly

MCC Magnetometer Calibration Coil

MCD3 Maximum-likelihood Convolutional Decoder version 3

MCDS Multi-Interface Circuit Data Sheet

MCI Measurement Cycle Interrupt

MCP Microchannel Plate

MCS Media Calibration System

MCS Multi-mission Command System

MDAS Mission Control, Data Management & Accountability, Spacecraft Analysis

Subsystem

MDDA Mini Dual Drive Actuator

MDE Mechanism Drive Electronics MDP Maximum Design Pressure

MDP Mission Design Panel

MDSCC Madrid Deep Space Communications Complex

MDU Master Data Unit ME Main Electronics

ME Main Engine

MEA Main Engine Actuator MEA Main Engine Assembly

MEA Main Engine A

MEB Main Engine B

MEBP Main Engine Base Plate

MEC Main Engine Cover
MECO Main Engine Cut Off

MEPU Main Engine Pre-aim Utility
MER Mars Exploration Rovers

MERLOT Multimedia Educational Resource for Learning and Online Teaching

MES Main Engine Start

MET Mission Elapsed Time

METCM Main Engine Trajectory Correction Maneuver

MEU Main Electronics Unit
MEV Main Engine Valve

MEVD Main Engine Valve Driver

MEVDA Main Engine Valve Drive Assembly
MEVDE Main Engine Valve Drive Electronics

MFG Manufacturer

MFILE Mnemonic Command File
MFR Medium Frequency Receiver

MGD Mission GDS Deployment (formerly CAT Team)

MGDS Multi-Mission Ground Data System

MGL Minimum Gain Level

MGN Magellan

MGSE Mechanical Ground Support Equipment

MGSS Multi-Mission Ground Data System and Services

MHD magnetohydrodynamic
MHW Multi-Hundred Watt

MHz Mega-Hertz

MICD Mechanical Interface Control Drawing

MIF Micrometeoroid Induced Failure

MIL-71 Merritt Island Launch Annex MILA Merritt Island Launch Area

MIL-STD Military Standard

MIM Mission Interface Manager

MIMI Magnetospheric Imaging Instrument

Min Minimum

MIP Mission Integration Panel

MIPL Multi Mission Image Processing Laboratory

MIPS Million Instructions Per Second

MIPS Multi-mission Image Processing System

MIPS Million Instructions Per Second

MIR Mid Infrared

MIRIS Modified Infrared Interometer Spectrometer

MIRO Microwave Instrument for the Rosetta Orbiter

MLI Multi-Layer Insulation

MM Mission Module

mm/s Millimeters Per Second

MMAC Multi Mass Acceleration Curve

MMC Martin Marietta Corporation

MMCM Multi-Mission Command

MMECDR Multi-mission Expanded Channelized Data Record

MMH monomethylhydrazine

MMII Mariner Mark II

MMR Monthly Management Review

mNm Milli-Newton-Meters

MNOS Metal Nitride Oxide Semiconductor

MO Mars Observer

MO&DA Mission Operations and Data Analysis

MOA Memorandum of Agreement
MOA Mission Operations Assurance

MOAM Mission Operations Assurance Manager

Mod Module

MODB Mission Operations Data Base

MOIF Moment of Inertia Factor
MON Mixed Oxides of Nitrogen

MON Monitor

MONTE Mission Analysis, Operations, and Navigation Toolkit Environment

MOP Maximum Operating Pressure

MOPS Maneuver Operations Program Set

MOR Mission Operations Review
MOS Metal Oxide Semiconductor

MOS Mission Operations System/Subsystem

MOS Mission Operations Support
MOS Mission Operations System

MOSFET Metal Oxide Semiconductor Field Effect Transistor

MOSO Multi-mission Operations System Organization

MOU Memorandum of Understanding

MP Mission Plan
MP Multiplier

MP Mission Planning

MPAe Max-Planck-Institut für Aeronomie (Max Planck Institute for Astronomy,

Germany)

MPD Mono-Propellant Driver
MPI Max Planck Institute

MPI/K Max Planck Institute for Kernphysik (Max Planck Institute for Nuclear Physics,

Germany)

MPLV Monopropellant Tank Assembly

MPM Mass Properties Model

MPS Memory Power Subassembly

MPS Editor Mission Planning and Sequencing Editor

MPT Mission Planning Team

MPVT Mission Planning Virtual Team

MR Microwave Receiver

mrad Microradians
Mrad Milliradians

MRB Material Review Board

MRD Mission Requirements Document

MRO Memory Readout

MRR Mission Requirements Request

MRRD Mission Requirements Reference Document

MRS Microwave Remote Sensing

MRSS Multi-Mission Resource Scheduling Services

ms Microsecond
mS Millisecond

MSA Mission Support Area

MSAR Microwave Spectrometer and Radiometer

MSAS Multimission Spacecraft Analysis Subsystem

MSB Most Significant Bit
MSC Magnetic Search Coil

MSC/LP Magnetic Search Coil/Langmuir Probe

Msec .001 second

MSI Medium Scale Integration

MSPSA Missile System Prelaunch Safety Approval
MSPSP Missile Safety Prelaunch Safety Package
MSPT Monopropellant System Performance Tool

MSS Mechanisms Subsystems

MSS Mission Sequence Subsystem

MSSO Mission Support & Services Office

MSTI Miniature Seeker Technology Integration

MSW Most Significant Word

MTA Monopropellant Tank Assembly
MTBF Mean Time Between Failures
MTF Modulation Transfer Function
MTP Microwave Temperature Profiler

MTS Mission Telemetry System

MUV Middle Ultraviolet

mV Milivolt

MVEA Majority-Voted Error Amplifier

mW .001 Watt

MWS MGSS Web Servers

Ν

N Newton number

N/A Not Applicable/Available

N/R No Ranging N_2H_2 Hydrazine

NA Nested Acronym

NAC Narrow Angle Camera

NACE Narrow Angle Camera Electronics

NACH Narrow Angle Camera Head

NaCl Sodium Chloride NAD Network Advisory

NAIF Navigation and Ancillary Information Facility
NASA National Aeronautics and Space Administration

NASCOM NASA Communications Network

NASDA National Space Development Agency (Japan)

NAT Nitric Acid Trihydrate

NAV Navigation

NAV Navigation Team

NB narrowband

NBS National Bureau of Standards

NCASE Number Case (number of long-term Monte Carlo cases)

NCH Narrow Angle Camera Head

NCI Narrow Angle Camera Interface

NCRX Number Crossing (number of Earth torus encountered in long-term Monte Carlo

cases)

NDE Non-Destructive Evaluation
NEA Noise Equivalent Angle

NEAR Near Earth Asteroid Rendezvous

NEI Non Explosive Initiator

NEP Noise Equivalent Power

NEP Nuclear-Electric Population

NEPA National Environmental Policy Act

NERT Near Real Time

NESC NASA Engineering and Safety Center

NESC National Electrical Safety Code

NESR Noise Equivalent Spectral Radiance

NFS Network File System

NGA Non-Gravitational Accelerations
NGIMS Neutral Gas and Ion Spectrometer

NGSS National Next Generation Science Standards

NH₃ Ammonia

NHB NASA Handbook

NIMS Near Infrared Mapping Spectrometer Subsystem

NIR Near Infrared

NIRS Near Infrared Spectrometer

NISN NASA Integrated Services Network

NIST National Institute of Standards and Technology

nKOM Narrowband Kilometer

NLR Netherlands Institute for Space Research

NLS National Launch System

NMC Network Monitor and Control

NMOS N-Channel Metal Oxide Semiconductor

NMSU New Mexico State University
NOA Network Operations Analyst

NOA Notice of Availability

NOCC Network Operations Control Center

NOI Notice of Intent

Nom Nominal

Non-oper Non-operating

NOP Network Operations Plan

NOPE Network Operations Project Engineer

NP Navigation Plan

NPD NASA Policy DirectiveNQR NASA Quarterly ReviewNR Navigation Requirements

NR Norsk Romsenter (Norwegian Space Centre, Norway)

NRAO National Radio Astronomy Observatory

NRZ Non-Return-to-Zero

NSDA Non Science Data Archive

NSE Northern Spring Equinox

NSI NASA Science Internet

NSI NASA Standard Initiator

NSM Northern Summer Mission

NSO Nuclear Safe Orbit

NSP Network Simplification Project

NSS NOCC Support System

NSSDC National Space Science Data Center

NSTA National Science Teachers Association

nT Nano Tesla

NTK NOCC Tracking Subsystem

NTO Nitrogen Tetroxide
NUV Near Ultraviolet

NVR Non-Volatile Residue

NXT NASA Standard X-Band Transponder

0

O Optional O/P Output

OA Optics Assembly

OAC Olin Aerospace Corporation

OACT Office of Advanced Concepts and Technology

OBDH On-Board Data Handling

OBPSM Observatoire de Paris or Observatoire de Paris-Meudon (Paris Observatory,

France)

OCI Operator Control Input

OCIO Office of the Chief Information Officer

OCT Operations Control Team

OD Orbit Determination

OD Outer Diameter

ODD Observation Design Display
ODM Orbit Deflection Maneuver
ODP Orbit Determination Program

ODR Original Data Record
ODT Orbiter Delay Time

OED Orthogonal Electric Dipoles

OIA Operational Interface Agreement

OIT Operational Interface Test

Olog operational log

OLR Open-Loop Receiver

OMP Observatory Midi-Pyrenees

OMSC Orthogonal Magnetic Search Coils

ONERA Office National d'Études et de Recherches Aerospatiales (National Office of

Aerospatial Studies and Research, France)

ONIPS Optical Navigation Image Processing System

ONP Optical Navigation Program

OP AMP Operational Amplifier

OPA Optics Assembly

OPA Optical Pallet Assembly

OPAG Outer Planets Assessment Group

OPE Orbiter Purge Equipment

Oper Operating

OpModes

OPNAV Optical Navigation Operational Modes

OPPC On-Point-Phase-Calibration

OPS Operations

OPTG Orbit Propagation and Timing Geometry File

Orb Orbiter
ORB Orbiter

ORR Operations Readiness Review

ORS Optical Remote Sensing

ORT Operational Readiness Test

OS Open Source

OSC Office of Space Communications

OSF Office of Space Flight

OSI Open Source Ion

OSNB Open Source Neutral Beam
OSNT Open Source Neutral Thermal

OSP Orbit Specific Plan

OSS Office of Space Science

OSSA Office of Space Science and Applications
OSSI Office of Space Science and Instruments

OST Operations Science Team

OST Orbiter Science Team

OTB Orbit Trim Backup

OTL Operations Technical Lead

OTM Orbit Trim Maneuver
OTP Orbit Trim Primary

OTP Orbit Trim Maneuver Primary Pass

OUT Outreach (Outreach Team)

OWLT One-Way Light Time

Ρ

P PerihelionP PreliminaryP PressureP Proposal

P&S Planning and Sequencing
P/FR Problem Failure Report

P/S Power Supply

PA Product Assurance
PA Proton Affinities

PAA Probe Aspect Angle

PAD Project Authorization Document
PAH Polycyclic Aromatic Hydrocarbon

PAL Programmable Array Logic

PAM Payload Assist Module

PAM-S Payload Assist Module-Special

PAP Privileged Action Program
PAR Perimeter Access Request

PAT PSG Automation Tool

PB Playback

PB&RTE Playback and Realtime Engineering

PC Personal Computer
PC Photoconductive
PC Pressure Chamber
PC Printed Circuit

PCA Power Control/Converter Assembly

PCA Pressurant Control Assembly
PCCB Project Change Control Board

PCD Project Change Directive

PCD Physical Contents Document

PCE Power Conditioning Equipment

PCE Power Control Electronics
PCK Planetary Constants Kernel

PCM Pulse-Code Modulation

PCO Probe Checkout

PCR Project Confirmation/Capability Review

PCU Power Converter/Conversion Unit
PD Project Document/Documentation

PD Proportional and Derivative
PDA Power Distribution Assembly

PDB Project Data Base

PDD Program Design Document
PDF Portable Document Format
PDF Probability Density Function
PDF Printer Description File

PDMP Project Data Management Plan

PDR Preliminary Design Review

PDRS Probe Data Relay Subsystem

PDS Planetary Data System
PDT Pointing Design Tool
PDU Power Distribution Unit
PEF Predicted Event File

PEM Periodic Engineering Maintenance

PENL Comet Penetrator Lander

PEQR Project Environmental Qualification Review

pF picoFarad
PF Protoflight

PF(i) Probability of Failure for the ith failure mode

Pfd Picofarad

PFM Protoflight Model

PFR Problem/Failure Report

PFU Protoflight Unit

PGT Predict Generation Tool
PGT Propellant Gauging Test

PHSF Payload Handling and Servicing Facility

PHSS Probe Harness Subsystem

PI Principal Investigator

PI Probability of Earth Impact
PI Proportional and Integral

PI/CRX Probability of Earth Impact/Crossing (spacecraft passing through Earth's torus)

PI/F(i) Probability of Earth Impact/Failure for the ith failure mode (trajectory occurrence)

PIA Propellant Isolation Assembly

PIDDP Planetary Instrument Definition and Development Program

PIDDR Preliminary Instrument Functional/Interface Requirements Design and Review

PIE Pre-Integration Event

PIM Periodic Instrument Maintenance

PIO Public Information Office

PIRDR Preliminary Interface Requirements and Design Review

PIRLS Probe IR Laser Spectrometer

PIT Project Interface Test

PIU Pixel input unit
PJR PeriJove Raise

PLD Programmable Logic Drive/Payload

PLF Payload Fairing

PLL Phase-Locked Loop

PLPP Pre/Post Launch Planetary Protection

PLS Plasma Spectrometer

PM Project Manager

PM Periodic Microstructure

PM Prime Mission

PMA Propulsion Module Assembly

PMC Probe Mission Complete/Completion

PMCB Propulsion Module Central Body
PMD Propulsion Management Device

PMEM Parameter Memory

PMR Project Management Report

PMS Power Management System
PMS Propulsion Module Subsystem

PMSEA Propulsion Module Subsystem, Electronics Assembly

PMT PhotoMultiplier Tube

PNR(i) Probability of No Recovery (given the failure mode and the time of impact)

POC Probe Operations Center

POE Probe Orbiter Earth
POP Project Operating Plan

POR Power On Reset

POST Proximal Orbit Science Team
POSW Probe On-Board Software

PP Project Plan
PPC Power PC

PPF Payload Processing Facility

PPF/HPF Payload Processing Facility/Hazardous Processing Facility

PPI Planetary Plasma Interactions

PPL Priority Playback List

ppm Parts Per Million

PPN Parametrized Post-Newtonian

PPO Pressed Plutonium Oxide
PPO Planetary Period Oscillation
PPP Planetary Protection Plan

PPRD Project Policies & Requirements Document

PPS Power & Pyrotechnics Subsystem

PPSS Power & Pyrotechnic Subsystem Simulator

PR Preship Review

PR Pressure Regulator

PRA Planetary Ranging Assembly

PRA Probe Relay Antenna

PRA Planetary Radio Astronomy

PRB Probe

PRD Program Requirements Document

PRG Program

PRI Pulse Repetition Interval

PRI Paper Records Inventory

PRJ Project

PRL Probe Relay Link

PRM Probe Release Maneuver
PRM Periapsis Raise Maneuver

PROM Programmable Read-Only Memory

Propul Propulsion

PRR Preliminary Requirements Review

PRR Project Requirements Review

PRS Problem Reporting System

PRSR Portable RSR

PRT Platinum Resistance Thermometer

PRWS Plasma and Radio Wave Spectrometer

PS Participating Scientist

PS Project Scientist

PS Project Start

PSA Probe Support Avionics

PSCFL Preliminary Safety Critical Function List

PSCN Probe Support Communications Network

PSD Power Spectral Density

PSE Probe Support Equipment

PSF Point Spread Function

PSG Project Science Group

psi Pounds Per Square Inch

PSI Pressure Systems Inc.

PSIG Pounds Per Square Inch Gauge

PSIV Preliminary Sequence Integration and Validation

PSK Phase-Shift Keying

PSL Project Software Library

PSLA Program Service Level Agreement

PSM Power Supply Module

PSR Project Status Review

PSS Probe Support Subsystem

PSS Project Support Subsystem

PSSR Plasma Spectroscopy/Sounder Receiver

PST PI Science Team
PSU Power Supply Unit
PSU Pyro Switching Unit

PTM Probe Targeting Maneuver

PTM Proof Test Model

Pu Plutonium

Pu-238 Plutonium-238
PUI Pick-Up Ions
PV Photovoltaic

PV Potential Vorticity

PV Pyro Valve

PVDF Polyvinlydene Fluoride

PV-ONMS Pioneer Venus Orbiter Neutral Mass Spectrometer

PVO Pioneer Venus Orbiter
PWA Plasma Wave Analyzer

PWA Permittivity Wave and Altimetry

PWB Printing Wiring Board

PWR Power

Q

QA Quality Assurance

QAI Quality Assurance Instruction
QBO Quasi-Biennial Oscillation

QC Quality Control

QE Quantum Efficiency

QFD Quality Function Deployment
QFS Qualification & Flight Spare
QMA Quadrupole Mass Analyzer

QMR Quarterly Management Review

QP Quasi-Periodic

QPM Quarterly Progress Meeting

QQC Quantity, Quality, and Continuity

QQO Quasi-Quadrennial Oscillation

QT Quantum Throughput

Qty Quantity

Qual Qualify/Qualification

QXO Quasi-Uncertain Time Period for Saturn's atmospheric-Oscillations

R

R&QA Reliability and Quality Assurance

R_J Radius of Jupiter R_S Radius of Saturn

R/CR Review/Certification Requirements

R/T Real-Time

RA Right Ascension

RA/Dec Right Ascension and Declination

RACS Radiation Analysis Completion Statement
RAD Radiation (absorbed radiation in Silicon)

RADAR Titan Radar Mapper

RAL Rutherford Appleton Laboratory

RAM Random Access Memory

RAMPAGE Remote Access Multi-Mission Processing & Ground

RAR Risk Assessment Review
RAS Radar Altimeter Science
RAS RADAR Analysis Software

R-Axis Along the anti-sun line

RB Repaired By

RBI Residual Bulk Image

RBOT Reaction-Wheel Bias Optimization Tool

RCM Rice Convection Model

RCP Right-Hand Circularly Polarized

RCP Right Circular Polarization

RCR Requirements Certification Review

RCS Reaction Control Subsystem
RCT Reaction Control Thruster

RCU Reset Control Unit

RCVR Receiver

RD Reference Document

RDD Release Description Document

RDM Radiation Design Margin
RDR Reduced Data Record
REA Rocket Engine Assembly

REL Release

REL timed Relative Timed REQ Requirement

REU Refurbished Engineering Unit
REU Remote Engineering Unit

REV Review
Rev Revision

Rev Same as orbit
RF Radio Frequency

RFE Radio Frequency Electronics

RFE Receiver Front End

RFEA Radio Frequency Electronics Assembly
RFES Radio Frequency Electronics Subsystem

RFI Radio Frequency Interference

RFIS Radio Frequency Instrument Subsystem

RFP Request for Proposal

RFS Radio Frequency Subsystem

RFSTLC Radio Frequency Subsystem Tracking Loop Capacitor

RG Ring-Grazing

RH Relative Humidity
RH Right-Handed

RHCP Right-Hand Circular Polarization

RHM RWA Hardware Manager
RHU Radioisotope Heater Unit
RHU Radioactive Heating Unit

RIE Reference Interferometer Electronics
RIMS Retarding Ion Mass Spectrometer
RITO Refraction Index of Titan Ocean

R_J Jupiter Radii

RKA Roskosmos (Russian Federal Space Agency)

RLPSE Remote Launch Pad Support Equipment

rms Root Mean Square

RMSS RADAR Mapping Sequencing Software

RNG Random Number Generator
ROC Remote Operations Center

ROD Record of Decision

RODS Remote Operating Data System
ROE Real-Time Operations Element

ROM Read Only Memory

ROM Rough Order of Magnitude

RORSAT Radar Ocean Reconnaissance Satellite

RotR Rules of the Road
RP Radio Propagation

RPA Retarding Potential Analyzer

RPA/LP Retarding Potential Analyzer/Langmuir Probe

RPC Ring Plane Crossing
RPC Ring Plasma Cavity

RPF Resource Prediction File

RPIF Regional Planetary Image Facility

RPM Revolution Per Minute

RPWS Radio and Plasma Wave Science

RPX Ring Plane Crossing
RRL Radio Relay Link

RRP Receiver and Ranging Processor

RS Radio Science
RS Radius of Saturn

R-S Reed-Solomon Encoding Method

Rs Saturn Radii

RS & QA Reliability, Safety & Quality Assurance

RSA Roskosmos (Russian Federal Space Agency)

RSDL Reed-Solomon Downlink

RSP Remote Sensing Pallet/Platform

RSR Radio Science Receiver
RSS Radio Science Subsystem

RSS Root Sum Squares

RSSG Radio Science Systems Group

RST Radio Science Team

RT Real Time
R-T Real Time

RT Remote Terminal

RTA Recharge Tank Assembly
RTC Real-Time Command

RTCIU Remote Terminal Communication Interface Unit

RTD Resistive Thermal Device

RTDT Remote Terminal Descriptor Table

RTE Real Time Engineering

RTE&SPB Real-Time Engineering and Science Playback

RTG Radioisotope Thermoelectric Generator

RTI Real Time Interval/Interrupt

RTIOU Remote Terminal Input-Output Unit

RTIU Real Time Interface Unit

RTIU Remote Terminal Interface Unit

RTLT Round-Trip Light Time
RTO Real-Time Operations

RTSIM Remote Terminal Simulator

RTX Real Time Executive

RUSO Receiver Ultra Stable Oscillator

RVF Resource Verification File

RW Reaction Wheel

RW&R Reading, Writing, & Rings
RWA Reaction Wheel Assembly

RWAC Reaction Wheel Attitude Control

RWE Reaction Wheel Electronics

RWG Ring Working Group

RWI Reaction Wheel Interface
RWM Reaction Wheel Mechanism
RWX Reaction Wheel Extension

S

S Second

S Signatures S&A Safe and Arm

s seconds

S&ER Science and Engineering Readout/Rate

S/A Safe-Arm Circuit

S/C Spacecraft
S/S Subsystem
S/W Software

SA System Administrator
SA File Science Activities File
SAB SAR Altimeter Burst

SADC Science Analog-to-Digital Converter

SAE Safety Engineer

SAEF Spacecraft Assembly and Encapsulation Facility

SAF Spacecraft Assembly Facility
SAH System Assembly Hardware
SAM Saturn Atmosphere Mapper
SAM Spectrum Analyzer Module

SAM-RC Structures and Materials (Safety) Review Committee

SAMWG Saturn Atmospheric Modeling Working Group

SAND System for Archival of Navigation Data

SAO Semi-Annual Oscillation
SAP Science Allocation Panel

SAPE Science and Project Engineering

SAR Safety Analysis Report
SAR Synthetic Aperture Radar

SASF Spacecraft Activity Sequence File

SASW Support Avionics Software

SAT Select-at-Test

SAUL Science and Uplink

SAWG Science Atmospheric/Archive Working Group
S-Band Radio Frequencies between 2 and 4 GHz

SBC Single Board Computer

SBE Single-Bit Error

SBN Small Bodies Node

SBP Software Capabilities Build Plan

SBT S-band Transmitter
SC Science Coordinator

SC Spacecraft

SC Science Confirmation

SCA Subsystem Control and Monitor Assembly

SCART Spacecraft Articulation

SCAS Science Calibration Subsystem

SCAT Scatterometer

sccm Standard Cubic Centimeters Per Minute

Solar Conjunction Experiment

SCCS Source Code Control System
SC-cut Stress Compensated Cut

SCDT Spacecraft Design Team

SCET Spacecraft Event Time

SCFL Safety Critical Function List

Sci Science

SCE

SCI Science Subsystem

SCI Science Teams

SCI & MP Science & Mission Planning

SCIOP Science Operations
SCLK Spacecraft Clock

SCM Software Configuration Manager

SCMF Spacecraft Message File

SCMG Software Configuration Management Group
SCML System Configuration Management Library
SCMP Software Configuration Management Plan

SCMS System Configuration Management Subgroup

SCO Spacecraft Operations

SCOE Special-Purpose Checkout Equipment

SCR Sequence Change Request
SCR Silicon Controlled Rectifier
SCR Software Change Request

SCS Spacecraft System

SCR Sequence Change Request

SCRAM Sequence Change Request Approval Meeting

SCSI Standard Computer System Interface

SCT Spacecraft Team

SCU Sequence Control Unit
SDB Science Data Buffer

SDD Software Design Document
SDD System Design Document
SDF Supplementary Data File
SDG System Design Group

SDO Solar Dynamics Observatory

SDR Software Design Review
SDR System Design Review

SDR Software Development Requirement

SDSP Software Development Standard Processes

SDT Sequence Design Team

SE Support Equipment
SE System Engineer
SE Support Equipment

SE&C System Engineering and Coordination

SEB Single Event Burnout

SEC Second

SEC Systematic Error Correction

SECDED Single Error Correction and Double Error Detection

SED Saturn Electrostatic Discharge

SED Spin Eject Device

SEDR Supplementary Experiment Data Record

SEE Single Event Effects

SEEGA Solar-Electric Earth Gravity Assist

SEF Spacecraft Events File
SEFH Standard Cubic Per Hour

SEG Segment

SEG Sequence of Events Generator/Generation

SEGR Single Event Gate Rupture

SEI Software Engineering Institute

SEL Single Event Latchup

SEL Selection

SEMPA Scanning Electron Microscope and Particle Analyzer

SENR Saturn Environment Review

Sep Separation

SEP Solar-Electric Propulsion
SEP Solar Energetic Particle

SEP Sun-Earth-Probe

SEPS Separation Subsystem

SEQ Sequence

SEQ_GEN Sequence Generator
SEQGEN Sequence Generator
SEQTRAN Sequence Translator

SER Safety Evaluation Report
SET Single-Event Transient

SETI Search for Extraterrestrial Intelligence

SEU Single Event Upset SFAD Scientist for a Day

SFDU Standard Format Data Unit

SFDUGUI Standard Format Data Unit Graphical User Interface

SFOC Space Flight Operations Center
SFOF Space Flight Operations Facility
SFOP Space Flight Operation Plan

SFOS Space Flight Operations Schedule

SFP System Fault Protection

SFRR Spacecraft Functional Requirements Review

SFT System Functional Test

S-G Self-Gravity

SHE Sensor Head Electronics
SI Science Instruments

Si Silicon

SI Support Imaging

SID Star ID

SIE Sequence Integration Engineer

Sig Signal

SiGe Silicon-Germanium

SigEs Significant Events Report
SIM Science Instrument Manager

SIM Sistema Interamericano de Metrologia (Inter-american Metrology System)

SIMS Secondary Ion Mass Spectrometer

SINDA Systems Improved Numerical Differencing Analyzer

SIP Sequence Implementation Process

SIPL SIP Lead

SIPS Science Instrument Purge Subsystem

SIRD Support Instrumentation Requirements Document

SIRTF Space Infrared Telescope Facility
SIRU Space Inertial Reference Unit

SIS Software Interface Specification

SIT Science Integrated Timeline

SITM Spacecraft Integration & Test Manager
SITP Subsystem Integration & Test Plan
SIV Sequence Integration & Validation

SKR Saturn Kilometric Radiation

SL Selection Letter

SLATS Solar Linear Array Technology System

SLI side-looking imager
SLOC Source Line of Code
SLS Space Launch System
SLT System Level Testing
SLT Saturn Local Time
SM Section Manager

SM Solstice Mission

SM Submodule

SMD Science and Mission Design
SMD Science Mission Directorate
SMDC Shielded Mild Detonating Cord

SME Scan Mechanism Electronics
SMP Software Management Plan
SMP Science Management Plan
SMR Software Management Review

SMT SSR Management Tool

SN Serial Number

SNER Science and Engineering
SNR Signal-to-Noise Ratio

SNT System Noise Temperature

SO S-Band Downlink
SO Science Operations

SOA Science Opportunity Analyzer
SOD Science Observation Design
SODB Science Operations Data Base

SOE Sequence of Events

SOH Safety Operations Handling Document SOHO Solar and Heliospheric Observatory

SOI Saturn Orbit Insertion

SOI/SOS Silicon-on-Insulator/Silicon-on-Sapphire

SOIRD Spacecraft Operations Interface Req. Document SOLSTICE Solar-Stellar Irradiance Comparison Experiment

SOP Standard Operating Procedure

SOP Science Operations Plan

SOPC Science Operations and Planning Computer

SOPU Science Observation Plan Update

SOS Silicon-on-Sapphire

SOS Solution Oriented Services

SOST Satellite Orbiter Science Team

SOU Sounder Mode

SOW Statement of Work

SP Safety Plane

SP Sequence Program
SP Science Planning

SPA Software Product Assurance

SPAE Software Product Assurance Engineer

SPAM Science Planning Assessment (of the) Merge

SPAP Software Product Assurance Plan

SPAPS Subsystem Parts Allocation Planning Summary
SPASE Software Product Assurance System Engineer
SPASS Science Planning Attitude Strategy Spreadsheet

SPC Science Program Committee
SPC Signal Processing Center
SPDT Single Pole Double Throw
SPE Signal Processing Electronics

SPE Sun Probe-Earth

SPE Science Planning Engineer

SPE Static Phase Error
SPF Single Point Failure

SPICE Spacecraft, Planet, Instrument, C-matrix, Events

SPICE Superthermal Plasma Investigation of cometary Environments

SPIT Sequence Process Improvement Team

SPK Spacecraft and Planet Kernel (ephemeris data file)

SPL Security Problem Log

SPLAF Sequence Phase List of Ancillary Files
SPLAT Science Planning Liens and Actions Table
SPOT Science Planning and Operations Team

SPP Sequence Planning Preview

SPRL Space Physics Research Laboratory

SPS Spacecraft Purge Subsystem
SPS Service Preparation Subsystem

SPST Science Planning & Sequence Team

SPT Specific Performance Test

SPT South Polar Terrain

SPVT Science Planning Virtual Team
SQA Software Quality Assurance
SQR Spacecraft Qualification Review

SR Safety Review
SR Shunt Radiator

Strontium-90

SRA

SR-90

Shunt Regulator Assembly

SRAM

Static Random-Access Memory

SRC

Subreflector Controller

SRCR

Software Requirements and Certification Review

SRD

Science Requirements Document

SRDD

Software Release Description Document

SRE

Subsystem Reliability Engineer

SRM

Solid Rocket Motor

SRMU

Solid Rocket Motor Upgrade

SRR

Software Requirements Review

SRRD

Science Requirements Reference Document

SRTG

Simulated Radioisotope Thermoelectric Generator

SRU

Stellar Reference Unit

SS

Sun Sensor

SSA

Sun Sensor Assembly

SSAC

Space Science Advisory Committee

SSAK

Second Surface Aluminized Kapton

SSAN

Space Science and Applications Notice

SSASC

Space Science and Applications Steering Committee

SSCCB

Spacecraft System Change Control Board

SSD

Software Specifications Document

SSD

Solid State Detector

SSDPS

Solar System Data Processing System

SSE

Software System Engineer

SSE

Sun Sensor Electronics

SSEC

Solar System Exploration Committee

SSEF

Spacecraft Significant Events File

SSF

Spacecraft Sequence File

SSG

Sub Sequence Generation

SSH

Sun Sensor Head

SSHA

Sun Sensor Head Assembly

SSI

Space Science Institute

SSI

Spectral Signal Indicator

SSM Spacecraft System Manager
SSM System Software Manager
SSO Sun-Synchronous Orbit
SSO Systems Safety Office

SSP Surface Science Package

SSPM Software Specification and Procedures Manual

SSPS Solid-State Power Switch

SSR Solid-State Recorder
SSRIU SSR Interface Unit

SSUP Science and Sequence Update Process

SSWG Satellite Surfaces Working Group

SSYSF Subsystem Fail Flag

ST Standard (JPL Specification)

ST Straight Through

STATRJ Station Polynomial File STC System Test Complex

STD Standard

STE System Test Equipment

STIS Space Telescope Imaging Spectrograph

STM Safe-To-Mate

STOR System Test Operations Report

STP Software Test Plan

STP Solar Thermal Population

STPM Structural/Thermal/Pyro Model

STRU Structure Subsystem

STS Space Transportation System
STSE System Test Support Equipment
STV Solar/Space Thermal Vacuum
SUPV Science Uplink Verification

SUROM Startup Read-Only Memory

SUROM Start-up ROM
SV Space Vehicle

SVDS Satellite/Space Vehicle Destruct System
SVPR Spacecraft Verification Plan Review

SVS Simulation and Verification Services

SVT Sequence Virtual Team

SVTL Sequence Virtual Team Lead

SW Software

SW CE Software Cognizant Engineer SW CogE Software Cognizant Engineer

SW DR Software Design Review
SW TE Software Test Engineer

SW TM Software Technical Manager
SWDR Software Design Review
SWG Science Working Group
SWG Saturn Working Group

SWG Segmentation Working Group

SWI&T Software Integration & Test

SWICS Solar Wind Ion Composition Spectrometer

SWRI Southwest Research Institute
SWRR Software Readiness Review
SWRR Software Requirements Review
SWVDR Software Version Delivery Review

SYS Simulation & Verification Services

SYS System Test

Т

T&O Test and Operations

T&OM Test and Operations Manager

T Tesla

T/C Temperature Control

Ta Tantalum T-A Titan A

TAG Test Agency

TAMWG Titan Atmospheric Modeling Working Group

TANK Tanks Models

TAP Technology and Applications Program

TAR Tape Archive

T-AXIS N cross R

TB Test Bed
TB Terabyte

TBC Test Bed Converter
TBC To Be Confirmed

TBD To Be Determined/Defined

TBPR Test Bed Plan Review

TBR To Be Resolved
TBR To Be Reviewed
TBS To Be Supplied

Tc Temperature Coefficient/Correction

TC STA Test Conductor Station

TC Telecommand

TC&DM Telemetry, Command & Data Management

TCA Thruster Cluster Assembly
TCA Time of Closest Approach
TCA Titan Closest Approach

TCD Trajectory Characteristics Document
TCM Temperature Control Model/Monitor

TCM Trajectory Correction Maneuver

TCP/IP Transmission Control Protocol/Internet Protocol

TCPS Titan IV/Centaur Purge Subsystem
TCS Telecommunications Subsystem
TCS Temperature Control Subsystem

TCU Telemetry Control Unit

TDA Telecommunications and Data Acquisition

TDC Time-to-Digital Converter

TDDS Tracking Data Delivery Subsystem

TDL Template Definition Language
TDM Thermal Development Model

TDN Temporal Dependence Networks

TDS Telemetry Delivery System

TDS Time Domain Sampler

TDS Tracking & Data Acquisition System
TDS Tracking and Data Services Element

TDS Tracking and Data System

TDS Telemetry Delivery and Storage

TDS Telemetry Delivery System

TEA Titan Exploration at Apoapsis

Telecom Telecommunications

TEMP Temperature Control Subsystem

Temp Temperature

TF Transfer Frame

TFE Tetrafluoroethylene (Teflon)
TFP Telecom Forecaster Predictor

Th Thorium

THSS Thermal Control Subsystem
TIA Team Interface Agreement

TID Total Ionizing Dose

TID Time Insertion and Distribution

TIGAR Telemetry Input Gap Analyzer & Reporter

TIMED Thermosphere, Ionosphere, Mesosphere, Energetics and Dynamics

TIP Target Interface Point

TIR Thermal Infrared Radiometer

TIREX Thermal Infrared Radiometer Experiment

TIS Telemetry Input System

TIV Titan IV

TJ Temperature Junction

TKG PASS Tracking Pass
TL Team Leader

TL Thermo luminescence

TL Timeline

TLA Three Letter Acronym

TLD Thermo Luminescent Dosimeter

TLM Telemetry

TLM Telemetry Modulation
TLP Telemetry Processor
TLV Threshold Limit Value

TM Team Member

TM Technical Manager

TM Telemetry

TM Temperature Multiplying

TM Traceability Matrix

TMC Target Motion Compensation
TMC Titan Meteorological Campaign
TMM Thermal Mathematical Model

TMM Thermal Math Model

TMO Table Mountain Observatory

TMOD Telecommunications and Mission Operations Directorate

TMP Telemetry Processor Module

TMS Telecommunications and Mission Services

TMU Telemetry Modulation Unit

TO Task Order
TOF Time of Flight

TOF MS Time-of-Flight Mass Spectrometry

TOL Time Ordered Listing

TOL Tolerance

TOP Test Operations Plan

TOPEX The Ocean Topography Experiment

TOR Terms of Reference

TOST Titan Observation Science Team

TOST Titan Orbiter Science Team

TOT Telemetry Output Tool

TP Time of Periapsis

TPM Telemetry Processor Module
TPM Telemetry Propulsion Module

TPS Third Party Software
TPV Thermo Photovoltaic
TPW True Polar Wander

TRACER Tracing and Control of Engineering Requirements

TRK Tracking

TRM Titan Radar Mapper

TRSF Test Results Summary Form

TS Targeting Specification

TSAC Tracking System Analytical Calibration

TSP Twisted Shielded Pair

TSR Technical Status Review

TSR Technical Support Representative
TSS Telecommunications Subsystem
TSSM Titan Saturn System Mission

TST Target & Star Tracker

TT Turntable

TT&C Telemetry Tracking and Command
TTACS Test Telemetry & Command System
TTC Tracking, Telemetry, & Command

TTC&DM Telemetry, Tracking, Command & Data Management

TTL Transistor-Transistor Logic

TU Timing Unit

TUB Technical University of Braunchwieg (Germany)

TUSO Transmitter Ultra Stable Oscillator

TV Thermal Vacuum

TVA Thruster/Valve Assembly

TVC Thrust Vector Control/Controller

TVC Thrust Vector Control
TWM Traveling Wave Maser
TWNC Two-way No-coherent
TWT Traveling Wave Tube
TWT Target Working Team

TWTA Traveling Wave Tube Amplifier
TWTA-B Traveling Wave Tube Amplifier-B

Tx Transmitter
TXR Transmitter

Typ Typical

U

U Uranium
U Update
U/L UpLink

U/L ONLY Uplink Only

UARS Upper Atmospheric Research Satellite

UCAC2 USNO CCD Astrograph Catalog Second Iteration

UCD User Controlled Data Base

UDMH Unsymmetrical Di-Methyl Hydrazine
UDS Universal Documentation System

UDT Universal Daylight Time
UEM Upper Equipment Module

UG User's Guide

UG/SOM User's Guide/Software Operations Manual

UHC Unexpectedly High-Current
UHR Upper Hybrid Resonance
ULCER Umbilical Lines Checker
ULF Ultra-Low Frequency
ULO Uplink Operations

ULS Ulysses
Umb Umbilical
UNA Un-allocated

UNOOSA United Nations Office For Outer Space Affairs

UOE Uplink Operations Element

UP Utility Program

UPAM Uplink Package Approval Meeting

UPS Uninterrupted Power System

UR Unit Response

USAF United States Air Force

USAR Updated Safety Analysis Report
USGS United States Geological Survey
USM Umbilical Separator Mechanism
USNO United States Naval Observatory

USO Ultra-Stable Oscillator
USS Upper Shell Structure

UT Universal Time

UTC Coordinated Universal Time

UTC Universal Time Code

UTMC United Technologies Microelectronics Center

UTPM Universal Time and Polar Motion

UV Ultraviolet
UV Undervoltage

UVIS Ultraviolet Imaging Spectrograph
UVSI Ultraviolet Spectrometer and Imager

V

V Volts
V Visible

V&V Verification and Validation

V/SHM Vector/Scalar Helium Magnetometer

VAC Volts Alternating Current

VC Virtual Channel
VC0 Virtual Channel "0"

VCCP Virtual Channel Command Program

VCD Verification Control Document
VCE Visible Channel Electronics
VCM Volatile Condensable Material
VCO Voltage-Controlled Oscillator

VDC Volts Direct Current

VDE Valve Driver Electronics

VDECU Valve Driver Electronics Control Unit

VDM Valve Driver Module

VEEGA Venus-Earth-Earth Gravity Assist

VEGA Venus-Earth-Gravity-Assist

VEJGA Venus-Earth-Jupiter Gravity Assist

VGR Voyager

VHM Vector Helium Magnetometer

VHS Vector Helium Sensor

VHSIC Very High-Speed Integrated Circuit

VI Visual Editor
VIB Vibration

VIMS Visible and Infrared Mapping Spectrometer

VIMS-IR VIMS Infrared

VIMSTM VIMS Thermal Model

VIMS-V VIMS Visible
VIS-IR Visible-Infrared
VLA Very Large Array

VLBI Very Long Baseline Interferometry

VLF Very Low Frequency
VMR Volume Mixing Ratio

VO75 Viking Orbiter

VOC Volts Direct Current

VOL Volume

VPF Vertical Processing Facility
VPN Virtual Private Network

VIII VIII VIII VAIE NEIWOIK

VRHU Variable Radioisotope Heater Unit

VSR VLBI Science Receiver

VSWR Voltage Standing Wave Ratio

VVEGA Venus-Venus-Earth-Gravity-Assist

VVEJGA Venus-Venus-Earth-Jupiter Gravity Assist
VVVJGA Venus-Venus-Jupiter-Gravity-Assist

W

W Wolfram

W.R.T. With Respect To

W/m2 Watts per Square Meter

WA Wide-Angle

WAC Wide-Angle Camera

WACE Wide-Angle Camera Electronics

WACH Wide-Angle Camera Head

WBR Wideband Receiver

WBS Work Breakdown Structure

WC(A) Worst Case (Analysis)
WCA Worst Case Analysis

WCI Wide-Angle Camera Head
WCI Wide-Angle Camera Interface

WDE Wheel Drive Electronics
WebCMD Web Server Command

WF/PC Wide Field/Planetary Camera

WFR Waveform

WFR Waveform Receiver

WG Working Group

WIP Work Implementation Plan
WOTU Window on the Universe

WP Water Products

WPA Work Package Agreement

WRT With Respect To

WS Workstation

WSE Workstation Environment

WSMC Western Space and Mission Center

WSMCR Western Space and Missile Center Regulation

WT Working Timeline

WTA Wax Thermal Actuator
WVR Waiver Request Form

WVSR Wide Band VSR

X

XBA Cross-Strap Bus Adapter

X-Band Radio Frequencies between 8 and 12 GHz

XD Cross-Discipline

XDTWT Cross-Discipline Target Working Team

XFR Transfer

XM Equinox Extended Mission

XM Extended Mission

XMTR Transmitter

XRTI Cross-string RTI

XSSA X-Band Solid State Adapter
XSSA X-Band Solid State Amplifier

XSSPA X-Band Solid State Power Amplifier

XSTRP Cross-Strap

X-TWTA X-Band Traveling Wave Tube Amplifier

XXM Extended-Extended Mission

Υ

Z

ZLP Zero Length Packet

ZPD Zero-Path Distance