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Description of document: National Aeronautics and Space Administration (NASA)

List of independent technical assessments conducted by the

Agency Technical Authority through the NASA

Engineering and Safety Center (NESC) 2003-2022 (?)

Requested date: 28-March-2022

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NASA Headquarters

MS 5-R30, Freedom of Information Act Office

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Washington, DC 20546

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Online FOIA Public Access Link (PAL)

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National Aeronautics and Space Administration



Mary W. Jackson NASA Headquarters Washington, DC 20546-0001

April 28, 2022

Reply to attn. of: Office of Communications

Re: NASA's FOIA Tracking Number 22-LaRC-F-00469

This is in response to your Freedom of Information Act (FOIA) request to the National Aeronautics and Space Administration (NASA), dated March 28, 2022, and received in this office on April 19, 2022. Your request was assigned the above-referenced tracking number and was for:

- 1) Each listing of independent technical assessments conducted by the Agency Technical Authority CATA) through the NASA Engineering and Safety Center (NESC). According to NASA, the ATA has conducted its 1000th independent technical assessment in 2020 or 2021. There may or may not be a complete listing, but I request each partial or full listing of these independent technical assessments.
- 2) A copy of the listing of 84 new technical assessments conducted by the ATA through NESC in 2020.

In response to your request, we conducted a search of the NASA's Engineering and Safety Center (NESC) using the search terms NESC requests. That search identified records responsive to your request. We reviewed the responsive records under the FOIA to determine whether they may be disclosed to you. Based on that review, this office is providing the following:

27 pages are being released in full (RIF).

Fees

Provisions of the FOIA allow us to recover part of the cost of complying with your request. In this instance, because the cost is below the \$50 minimum, there is no charge.

Appeal

You have the right to appeal my action regarding your request. Your appeal must be received within 90 days of the date of this response. Please send your appeal to:

Administrator NASA Headquarters Executive Secretariat ATTN: FOIA Appeals MS 9R17 300 E Street S.W. Washington, DC 20546

Both the envelope and letter of appeal should be clearly marked, "Appeal under the Freedom of Information Act." You must also include a copy of your initial request, the adverse determination, and any other correspondence with the FOIA office. In order to expedite the appellate process and ensure full consideration of your appeal, your appeal should contain a brief statement of the reasons you believe this initial determination should be reversed. Additional information on submitting an appeal is set forth in the NASA FOIA regulations at 14 C.F.R. § 1206.700.

Assistance and Dispute Resolution Services

If you have any questions, please feel free to contact me at carissa.s.wheeler@nasa.gov or 757-746-0585. For further assistance and to discuss any aspect of your request you may also contact:

Stephanie Fox Chief FOIA Public Liaison Freedom of Information Act Office NASA Headquarters 300 E Street, S.W., 5P32 Washington D.C. 20546 Phone: 202-358-1553

Email: Stephanie.K.Fox@nasa.gov

Additionally, you may contact the Office of Government Information Services (OGIS) at the National Archives and Records Administration to inquire about the FOIA mediation services it offers. The contact information for OGIS is as follows: Office of Government Information Services, National Archives and Records Administration, 8601 Adelphi Road-OGIS, College Park, Maryland 20740-6001, e-mail at ogis@nara.gov; telephone at 202-741-5770; toll free at 1-877-684-6448; or facsimile at 202-741-5769.

Important: Please note that contacting any agency official including myself, NASA's Chief FOIA Public Liaison, and/or OGIS is not an alternative to filing an administrative appeal and does not stop the 90 day appeal clock.

Sincerely,

Carissa S. Wheeler

Causai S. Wheeler

Government Information Specialist

Enclosure

TI-09-00539	26-AA Ames Wind Tunnel Model Design & Stress Analysis
TI-19-01469	2nd NESC Lunar Dust Workshop
TI-11-00737	44P Progress Anomaly Investigation Team Support
TI-18-01391	6 Degree-of-Freedom Trajectory Simulation with Integrated CFD Aerodynamics
TI-05-00144	8` HTT Oxygen Storage Pressure Vessel Inspection Requirements
TI-14-00957	A Comprehensive Analysis of the X-15 Flight 3-65 Accident
TI-10-00623	A-3 Test Stand Component Structural Dynamics Analysis
TI-11-00711	A3 Test Stand ICDR Technical Support
TI-09-00566	A3 Test Stand Simulated Altitude System Review
TI-08-00484	A3 Test Stand Technical Support
TI-16-01126	AA-2 Independent Review Team
TI-21-01677	AACT Risk Reduction Project - inSitu Monitoring Category
TI-21-01676	AACT Risk Reduction Project - Metallurgy Category
TI-21-01678	AACT Risk Reduction Project - Safe Life Category
TI-21-01631	Ablative Thermal Protection System Reuse Study
TI-17-01207	Accelerance Decoupling for Modal Test
TI-12-00822	ACCESS Probing Aircraft Flight Test Hazard Mitigation
TI-19-01483	ACCP SET Requests S&I TDT to Support/Perform a TRA of the Lidar Instruments
TI-08-00489	ACES Glove Issue
TI-04-00007	Actel FPGA Reliability
TI-16-01191	Additional Characterization and Improvements of the Multi-Purpose COPV Liner Inspection System
TI-15-01103	Additive Manufactured (AM) Fuel Turbopump (FTP) Disassembly/Inspection and Post-Test Data Evaluation
TI-16-01121	Additive Manufacturing Structural Integrity Initiative (AMSII) Project Oversight and Support
TI-15-01074	Additively Manufactured Metals in Oxygen Systems Project Support
TI-18-01305	Adiabatic Demagnetization Refrigeration on SOFIA Science Instruments
TI-12-00800	Advanced Stirling Converter Heater Head Critical Flaw Analysis
TI-12-00829	Advanced Stirling Converter Heater Head Fatigue/Crack Growth
TI-10-00621	Advanced Stirling Converter Nonconformance
TI-12-00789	Advancing the State-of-the-Practice for Liquid Rocket Engine Combustion Stability Assessment
TI-04-00024	AEDC Solid Rocket Motor Plume Test
TI-08-00490	Aeroacoustics Support for Ares 1-X
TI-18-01311	Aerodynamic Buffet Flight Test
TI-12-00797	Aerodynamic Testing of Alternate Spacecraft Geometries on the SLS
TI-18-01297	Aerospace Valve Industrial Base and Acquisition Practices Assessment
TI-17-01210	Affordable Vehicle Avionics (AVA) GPS Testing Support
TI-19-01475	AFRL/STMD Advanced Rad-Hard Memory
TI-17-01261	Agency Systemic M&P Issues
TI-20-01594	Agile Software Development Methodology Use Summary
TI-09-00527	Aircraft Exhaust Heat Effects
TI-11-00739	AJ-26 Engine Failure Investigation Results and Analysis Review
TI-13-00861	AK-225 Solvent Replacement Evaluation
TI-06-00369	ALAS Follow On Technical Investigations

TI-10-00620	Alpha Magnetic Spectrometer Independent Review
TI-15-01034	Alternative Orion Small Cell Battery Design
TI-14-00943	Alternative Software Programming for Human Spaceflight
TI-10-00633	Altitude Combustion Stand Independent Review
TI-09-00571	Aluminum Tape on Ares 1-X Cable Harnesses
TI-17-01253	Analysis and Test of SLS Core and Booster Stage FTS Batteries
TI-13-00876	Analysis of ATD Response for Proposed Orion CIAS
TI-06-00300	Analysis Study for Ice Frost Ramps Consultation
TI-05-00126	Analytical Tools for Assessment of Orbiter Tile Damage Effects on Vehicle Thermal & Structural Response
TI-15-01071	Analyze Variable Effects on Oxygen Impact Reaction Sensitivity of Aerosal Solstice
TI-04-00041	AN-Type Fittings in ISS Node 2 Ammonia System
TI-15-01037	Application of System Identification to Parachute Modeling
TI-09-00560	Aqua Spacecraft Solar Power Thermistor Anomaly
TI-07-00417	Aquarius NDE Support
TI-10-00612	Arc Jet Evaluation Working Group Support
TI-20-01585	Arecibo Failure Support
TI-09-00528	Ares 1X Thruster Pressure Cartridge Issue
TI-09-00569	Ares 1X Upper Stage Simulator Bolt Review
TI-08-00456	Ares 1-X Vibro-acoustic Environments
TI-07-00384	Ares I Aeroacoustics Assessment
TI-09-00503	Ares I Lift-Off Acoustics Test Plan Independent Review
TI-08-00491	Ares I US Manufacturing & Assembly Plan Independent Review
TI-09-00502	Ares I-X Demonstration Flight Instrumentation Issue
TI-09-00534	Ares I-X Ground Wind Loads Technical Quality Review
TI-09-00557	Ares I-X Launch Drift
TI-09-00559	Ares I-X Upper Stage Breakup and Debris Review
TI-07-00442	Ares I-X USS Project Independent Structural Review
TI-08-00445	ARES SRB Thrust Oscillation
TI-13-00910	Ascent Abort Loads Tool Development
TI-07-00388	Assess Explosion/Blast Dynamics for Cx Launch Vehicles
TI-10-00630	Assess Qualification of Taurus Fairing Frangible Separation Ring
TI-08-00482	Assess the LC-39A Flame Trench Repair
TI-10-00609	Assess/Mitigate Risk Through the Use of CASE Tools
TI-13-00906	Assessing Risks of Frangible Joint Designs
TI-21-01632	Assessing the Effects of Pressure Spikes on Material in a Hypergolic Engine
TI-20-01518	Assessment of Biocide Impacts on Life Support and EVA Architectures
TI-08-00477	Assessment of CFD Analysis of STS-124 Pad A Launch Damage
TI-12-00796	Assessment of Combustion Instability in Black Brant Motors
TI-08-00465	Assessment of Crew Risks During a Hubble Rescue Mission
TI-05-00117	Assessment of Cure In Place Ablative Applicator
TI-09-00546	Assessment of DDT&E Process for Robustness of Spaceflight PLDs
TI-18-01317	Assessment of EEE parts Copper Wire Bonds for Space Programs

TI-08-00471	Assessment of Fatigue-Based Reliability Computations for SRB PBIS Transformers
TI-07-00402	Assessment of Gravito-Inertial Loads and Environments
TI-07-00422	Assessment of ISS Plasma Contactor Unit Utilization
TI-09-00550	Assessment of ISS Readiness for Six-Person Crew
TI-08-00493	Assessment of LCROSS Vishay Capacitor Issue
TI-17-01250	Assessment of Lead H2 Pop During SLS RS-25 Start
TI-09-00597	Assessment of Microphone Phased Array for Measuring Launch Vehicle Lift-off Acoustics
TI-08-00492	Assessment of Risks & Mitigation Strategies for Use of LLB
TI-18-01367	Assessment of Spacecraft Passivation Techniques
TI-18-01373	Assessment of SpaceX Autonomous Flight Termination System
TI-10-00673	Assessment of the CrIS Instrument Structural Frame
TI-10-00640	Assessment of the SSP Approach to STS-135 with Soyuz Crew Rescue
TI-13-00873	Asteroid Retrieval Mission SEP Analysis of Alternatives
TI-12-00768	Atlantis Static Display Structural Analysis
TI-05-00285	Atlas V Tank Failure Investigation & Stress Analysis
TI-09-00605	Autonomous Aerobraking (Phase 2)
TI-10-00679	Autonomous Rendezvous VNS Flight Experiment on ISS
TI-22-01724	Avionics Packaging Engineering Processes and Best Practices
TI-16-01130	B-2 SLS Green Run Handling Processes
TI-05-00145	Battery charge electronics single point failure issue on MRO.
TI-12-00794	BEI Cyrogenic Propellant Explosions IA
TI-14-00990	Best Practices for Organizational Resilience in the ISS Program
TI-04-00081	Body Flap and Rudder Speed Brake Actuator Bearing
TI-20-01508	Boeing 1553 Dropped Commands
TI-17-01284	Boeing Ascent Cover Separation System Independent Assessment
TI-14-00924	Boeing Independent Review of Commercial Crew Capsule Lithium Ion Battery Design
TI-15-01101	Boeing Metallic Tank Diaphragm Fracture Test Support
TI-20-01596	Boeing Sensor Anomaly Investigation Support
TI-18-01399	Boeing Smart Initiator Anomaly Support
TI-19-01479	Boeing Smart Initiator Redesign Support
TI-21-01694	Boeing Starliner ECLSS-ATCS Review
TI-07-00423	BOK3 Computer Evaluation
TI-19-01433	BON GCR Model Improvements
TI-15-01038	Bond Verification Plan for Orion's Molded Avcoat Block Heatshield Design
TI-05-00127	Bracket Ice Elimination
TI-21-01713	Buffet/Aeroacoustic Analysis of SLS Core Stage Foam Repair for Artemis 1
TI-16-01119	Burst Factor Assessment for Pressure Vessels
TI-12-00774	CAD Tools to Support Human Factors Design Teams
TI-08-00451	CAIL Independent Analysis
TI-07-00437	CALIPSO Laser Transmitter EEE Part Radiation Testing
TI-03-00001	CALIPSO Proteus bus design concerns
TI-17-01291	Calorimetry for Large Format Lithium-Ion Cell Thermal Runaway

TI-16-01181	Calorimetry for Lithium-ion Battery Thermal Runaway
TI-19-01418	Capacitor Microstructure Analysis/Tools Development
TI-13-00860	Carbon Fiber Strand Tensile Failure Dynamic Event Characterization
TI-12-00803	Cassini Plasma Spectrometer (CAPS) Short Circuit Anomaly
TI-04-00029	Cassini Saturn Orbit Insertion (SOI) CERR
TI-11-00743	Cassini Spacecraft Short Anomaly
TI-09-00572	Cassini Titan Flyby Review
TI-04-00076	Cassini/Huygens Entry; Descent and Landing
TI-19-01476	CCP Ascent Stability
TI-15-01084	CCP Avionics Architecture Review
TI-20-01581	CCP Boeing CST-100 Fluid Systems Contamination
TI-17-01292	CCP Configuration Management Support
TI-15-01081	CCP Crew Orientation Tiger Team Support
TI-20-01598	CCP Crew-1 TPS Peer Review
TI-21-01687	CCP Fracture Control Risk Reduction
TI-16-01124	CCP Incremental Risk
TI-20-01583	CCP Launch Vehicle Orbital Tube Welding POD Study Samples
TI-16-01133	CCP Load and Go Assessment
TI-18-01326	CCP Main Parachute NDE
TI-17-01286	CCP Parachute Flight/Ground Tests & Vendor Packing/Rigging Activities
TI-18-01324	CCP Parachute Pack Ground Extraction Testing
TI-19-01468	CCP Post-flight Reference Radiation Environments
TI-17-01265	CCP Request for Pyroshock Support
TI-16-01116	CCP Review of NDE of SpaceX Additive Manufacturing Support
TI-18-01327	CCP SpaceX 2.0 COPV Grain Size
TI-22-01725	CCP SpaceX Dragon Software Erroneous Output During Entry Risk Mitigation
TI-20-01586	CCP SpaceX Falcon 9 Booster Return Loads Reuse Implications
TI-17-01271	CCP SpaceX Loads and Dynamics Test Support
TI-20-01605	CCP SpaceX Mass Properties Evaluation
TI-20-01608	CCP SpaceX Software Common Mode Failure Risk Assessment
TI-16-01122	CCP Systems Engineering and Integration Processes
TI-18-01321	CCP ULA TPS Spray On Foam Insulation (SOFI) Testing
TI-15-01089	CCP V&V Integration and Mapping
TI-16-01186	CCP Water Drop Test Peer Review
TI-16-01173	Center Burst Cracks Present on Bearing Balls in NASA Mechanisms
TI-12-00769	Certification of Chute Systems for High Altitude Deployments
TI-08-00469	CEV (Orion) Occupant Protection Phase 2
TI-06-00348	CEV Integrated Landing & Recovery Evaluation
TI-06-00318	CEV LAS Aero Evaluation
TI-06-00291	CEV Smart Buyer Support
TI-20-01577	CFD Assessment of AA-2 Axial Force Anomaly
TI-09-00542	CFD for Cryogenic Storage Tank Analysis

TI-21-01627	CFD/DTA Analysis for SNC Zr H202 Propulsion System Cavitation Test
TI-20-01537	CFD/DTA Analysis for the SNC Zr-H2O2 Propulsion System
TI-15-01107	Chandra X-Ray Observatory ACE Real-Time Data Support
TI-12-00782	Chandra X-Ray Observatory COPV Risk Assessment
TI-19-01482	Characterization of Internal Insulation Thermal Performance
TI-18-01378	Characterization of Thick Section Aluminum-Lithium 2195 Natural Aging
TI-12-00770	Check-Cases for Verification of 6-Degree-of-Freedom Flight Vehicle Simulations
TI-07-00373	Chipped Gear Tooth in Rudder/Speedbrake Actuator Qual Unit
TI-20-01569	Circuit Board Signal Integrity/Pwr Analysis and Training for CLPS Missions
TI-06-00309	CLV Project RCS Thrust and Propellant Weight Sizing
TI-06-00352	CLV Thrust Vector Control Propellant Options
TI-06-00335	CLV Upper Stage Weight Allocation Peer Review
TI-07-00436	CM Crew Seat Load Attenuation and Isolation
TI-07-00375	CMG-1 Failure Investigation Dissenting Opinion
TI-05-00265	CMG1 Root Cause Analysis
TI-18-01316	Cold Atom Laboratory Vibration/Dynamics
TI-16-01178	Commercial Crew Aerodynamics Boeing Peer Review
TI-15-01085	Commercial Crew Aerodynamics Peer Review: Assessment of SpaceX Aerodynamics Databases
TI-13-00855	Commercial Crew Program Ascent Abort Model Review
TI-16-01120	Commercial Crew Program Turbopump Cracking Concern Support
TI-10-00685	Composite Crew Module Permeability Characterization
TI-06-00307	Composite Crew Module Pressure Vessel
TI-06-00361	Computational NDE for Critical Exploration Methodology
TI-12-00785	Computing Buffet Environments for Space Launch System Configurations
TI-06-00301	CONAX Pyrotechnic Valve Failures
TI-05-00216	Concern for safety of welding & polishing of cracks related to MPS LH2 Flowliners
TI-10-00688	CoNNeCT Spacewire High Data Rate Anomaly Support
TI-08-00483	Constellation Program Loads Review
TI-21-01717	Contamination Control Engineer Consultant for GLIDE Mission
TI-04-00022	Cooling Water Chemistry
TI-18-01386	Coordinated Review of the SpaceX LO2 Loading Systems
TI-18-01331	COPV 2.0 Overwrap Testing
TI-17-01199	COPV Densified LOX Compatibility Assessment
TI-09-00543	COPV Life Prediction (Reliability) Model Development
TI-16-01183	COPV Life Test
TI-14-00954	COPV Liner Inspection Capability Development Assessment
TI-09-00537	COPV Stress Rupture Reliability and NASA CPVWG
TI-22-01723	Corrosion Evaluation of Dragon Heat Shield for Reuse
TI-21-01705	Corrosion Support for SpaceX Waste Management System Anomaly
TI-08-00487	CPAS Independent Reliability Analysis
TI-11-00697	CPAS Wake Deficit Wind Tunnel Testing
TI-13-00913	CPV Working Group

TI-22-01743	Cracked Samples for NDE Standards
TI-04-00108	Cracked Thick Film Coating on Electronic Packages on Delta 2 Vehicle
TI-06-00315	Crawler Transporter New Shoe Failure (Cracked)
TI-18-01314	Creation of Agency Standards for Additive Manufacturing
TI-09-00570	Crew Module Water Landing Modeling Assessment
TI-06-00370	Critical Flaw Size Analysis for Aries I-1 USS Element Design
TI-21-01690	Cross-Program Exposure Testing Review
TI-17-01201	Cross-Program Verification and Validation Integration and Mapping Assessment
TI-20-01568	CST-100 Ascent Cover Technical Support
TI-16-01123	CubeSat Radiation Environments and ISS Radiation Dose Data
TI-14-00931	Curiosity Wheel Consultation
TI-08-00448	Cx Probabilistic Requirements Verification Methods Best Practices Improvement
TI-08-00453	CxP Mass Properties & Performance Management Assessment
TI-07-00374	CxP SE Avionics Architecture Study Support
TI-20-01515	Cyclomatic Complexity Evaluation
TI-15-01073	CYGNSS Project Peak Power Tracker Board Consultation
TI-14-00939	CYGNSS RWA Technical Support
TI-10-00669	DARPA/NASA Horizontal Launch Study
TI-10-00663	DARPA/NASA Manned GEO Satellite Servicing Study
TI-05-00128	DART Mishap Investigation Board
TI-19-01443	DART Spacecraft SmartNav Independent Review Team Technical Support
TI-05-00279	Data Expertise for Independent Verification for ET LH2 Prepress LCC Issues
TI-07-00380	DAWN High Voltage Electronics Assembly Failure Support
TI-07-00393	DAWN Waveguide Venting Analysis Review
TI-06-00351	DC/DC Converter Investigation
TI-12-00799	Dedicated NanoLauncher for OCT Small Spacecraft Feasibility Study
TI-07-00382	Delta II Heavy Transonic Anomaly Peer Review
TI-16-01182	Demonstration of IETM to Support Ground Systems Operations
TI-08-00454	De-Scope of Ares I-X DFI
TI-11-00696	Design Concept for New Sustainer Motor for Sounding Rocket Prgm
TI-17-01208	Design of Experiments Support for Commercial Crew Program Arc Jet Testing
TI-08-00462	Design Team Support for Adjusting Ares I Vehicle Frequencies
TI-20-01529	Determination of Autoignition Temperature of Isopropyl Alcohol and Ethanol
TI-18-01382	Determining the Composition and Depth of the Lakes on Titan
TI-20-01539	Development of Fire Suppression System Requirements for SpaceX Crew-1+
TI-15-01076	Development of Softgoods Design Factors of Safety Support
TI-06-00296	Diaz Action 23: Develop std. for modeling & testing of system components & assemblies.
TI-05-00284	Diaz Action 4: Develop Std. for Development; Documentation & Operation of Models & Simulations
TI-07-00401	Distributed Impact Detector System Evaluation
TI-11-00692	Doppler Radar Profiler for Launch Winds
TI-21-01715	Double Asteroid Redirection Test (DART) Solar Array Loads Issue Resolution
TI-18-01379	Dragon Prop Landing and Orbit Tank Failures - Independent Review

TI-18-01339	Dragon Propellant and Pressurization COPV Support
TI-21-01709	Dragonfly Dynamic Stability
TI-21-01696	Dream Chaser Oxidizer Tank Design and Qualification Assessment
TI-17-01280	Dream chaser structural design review support
TI-16-01192	DSCOVR CompHub Reset Anomaly
TI-18-01303	DSCOVR PHA Data Analysis
TI-22-01742	Dynamic Pitch Testing of Dragon Capsule at Transonic Speeds
TI-12-00793	E-1 Test Facility Blast/Acoustic Effect Mitigation Tools
TI-14-00952	E-1 Test Stand Structural Damage Assessment
TI-07-00440	ECO Sensor System Issues Support for STS-122 Launch
TI-17-01252	ECOSTRESS Vibe Failure FRB Support
TI-15-01075	EEE Parts Testing for CCP
TI-05-00141	Effect of IR Lamp Irradiation on ET TPS
TI-20-01561	Effects of Helium Concentration on TEA-TEB Combustion in Oxygen
TI-14-00927	Effects of Humidity on Dry Film Lubricant Storage and Performance
TI-18-01380	EGS Crawlerway Geotechnical Support
TI-19-01417	EGS Crew Module Test Article (CMTA) Design Peer Review
TI-20-01516	EGS ICPS Umbilical Modeling Evaluation and Assessment
TI-17-01290	EGS Mobile Launcher (ML) Structures Model Peer Review
TI-20-01534	EGS Mobile Launcher 1 Weld Waiver Rationale Support
TI-21-01673	EGS Mobile Launcher Swing Arm Hydraulic Analysis Support
TI-06-00353	Elastic Plastic Fracture Mechanics Data for Aluminum-Lined COPV's
TI-09-00535	ELC Avionics Independent Review
TI-16-01171	Electrical Power for High-Voltage DC Battery Close-Call Investigation at AFRC
TI-13-00850	Electronic Components in Safety-Critical Avionics Systems
TI-16-01109	EM-1 TPS Flight Data Augmentation
TI-10-00634	Emergency Return Vehicle Study
TI-10-00686	Empirical Launch Vehicle Explosion Model Evaluation
TI-12-00783	Empirical Model Development for Predicting Shock Response on Composite Materials Subjected to Pyroshock Loading
TI-07-00443	EMU Glove Damage
TI-22-01746	EMU water management
TI-15-01077	EMU Water Pump Redesign
TI-21-01629	Energy Modulator Webbing Shredding Testing
TI-13-00848	Energy Storage Device Applications and Safety Improvements
TI-05-00214	Engine Cut-Off (ECO) Sensor Reliability Testing
TI-15-01036	Engine Hot Fire ATP Requirements
TI-14-00937	Engineering Audit of EFT-1 Build
TI-13-00919	Enhanced Melamine Foam Acoustic Test
TI-14-00999	Entry TPS MMOD Damage Risk and Mitigation for Crewed Vehicles
TI-21-01686	EPIC/Athena Assessment Group Tech Support
TI-10-00636	ESA SAVOIR Initiative
TI-21-01643	ESD Critical Event Assessment Reviews

TI-15-01025	ESD Integrated Avionics and Software V&V Plan Assessment
TI-20-01565	ESD Integrated Hazard Review
TI-15-01028	ESD Integration Review
TI-18-01398	ESD Support Task for Dynamic System and Flight Test Analysis and Evaluation
TI-15-01045	ESD Verification and Validation Plan
TI-14-00956	ESI Separation Risk Assessment
TI-15-01094	ESM Hyper System Valve Bellows Peer Review
TI-16-01165	ESM Major Propulsion Design Upgrades
TI-21-01697	ESM Pressure Control Assembly Valve Model Update
TI-16-01187	E-STA Dynamic Model Correlation
TI-06-00295	ET Alternative IFR Design Concept Assessment
TI-06-00321	ET Bipod Bolt Locking Feature Verification
TI-04-00034	ET Foam Application Defect Statistical Analysis
TI-04-00096	ET Foam Certification
TI-06-00299	ET Foam Thermal Analysis Project
TI-04-00105	ET Innertank Flange Evaluation
TI-04-00103	ET LOX Feedline Bellows Baseline vs Drip Lip Testing
TI-04-00104	ET LOX Feedline Bellows Ice Prevention Design
TI-04-00033	ET LOX Feedline Bellows Material Selection Support
TI-07-00418	ET-120 Independent Review Support
TI-20-01593	Ethical Use of Artificial Intelligence Policy Development
TI-13-00878	Europa Clipper Power Source Trade Study Independent Review
TI-17-01281	Europa Lander Radiation Test Technical Support
TI-20-01536	European Solar Array Wing Deploy Model Independent Review Support
TI-21-01688	EUS COPV Helium Tank with Large Grain Aluminum Alloy
TI-20-01612	Evaluate Falcon LOX Shroud and HEX Can Leakage
TI-19-01477	Evaluating Risk of an Alternative Pyro Lot Acceptance Test Plan
TI-13-00852	Evaluation of Agency Non-Code (ASME) Layered Pressure Vessels
TI-20-01535	Evaluation of Alternate Helium Pressure Control Component
TI-06-00342	Evaluation of ET Bi-Pod Bolt Inserts & Sprayed on Foam as Secondary Locking Feature
TI-17-01276	Evaluation of Exceptions for Etchant use prior to Dye Penetrant Inspections
TI-06-00308	Evaluation of Land versus Water Landings for CEV
TI-14-01000	Evaluation of MMOD Risk Predictions with Available On-orbit Assets
TI-16-01162	Evaluation of Occupant Protection Requirement Verification Approach by CCP Partners
TI-20-01528	Evaluation of SpaceX Fire Suppression
TI-13-00857	Evaluation/Validation of Range Safety BLASTDFO Model
TI-21-01710	Examination of Space Vehicle Ethernet Interconnects
TI-20-01521	Examination of Time-Triggered Ethernet in the Artemis Architecture
TI-21-01706	Exploration Systems Exterior Lighting Design Guidance
TI-12-00766	Exploration Systems Independent Modeling and Simulation
TI-16-01180	Express Logistics Carrier Reverse Capacitor Follow-on Testing
TI-07-00406	External Pressure Field Predictions Supporting Cx Vehicle Aeroacoustics

TI-04-00026	External Tank Spray on Insulation/Foam
TI-13-00879	Extravehicular Mobility Unit (EMU) Lithium Ion Battery Assessment
TI-20-01571	Extravehicular Mobility Unit (EMU) Sublimator Corrosion
TI-17-01205	F/A-18 Fleet Physiological Events
TI-12-00792	F-22 Life Support System Independent Analysis
TI-15-01093	Fast Coupled Loads Analysis via Norton-Thevenin Receptance Coupling
TI-09-00567	Fault Management Handbook
TI-06-00337	Feasibility of Conducting J-2X Engine Testing at GRC Plum Brook Station B-2 Facility
TI-18-01296	Feasibility of ultrasonic level sensors for ESM MKII propellant tanks
TI-11-00695	Fermi On-Orbit Slip Ring Anomaly
TI-19-01498	Filtration of Spaceflight Propulsion and Pressurant Systems
TI-20-01587	Flex Harness Technical Support
TI-18-01312	Flexible Multibody Dynamics Modeling for Space Vehicles
TI-06-00354	Flight Data EDL Repository
TI-06-00359	Flight Force Measurements to Improve Coupled Loads
TI-18-01313	Flight Mechanics Analysis Tools Interoperability and Component Sharing
TI-05-00115	Flight Rationale for Expected Debris Assessment
TI-09-00598	Flight Simulation Model Exchange
TI-13-00847	Flight Testing of the SLS Launch Vehicle AAC Algorithm
TI-10-00665	Flight Vibration and Shock Envmnts for Black Brant X Upper Stage
TI-16-01161	Flight/Load Indicator Development and Usage
TI-04-00008	Flow Liner Test Planning and Rationale for Flight
TI-04-00078	Flowliner Benchtop Test
TI-12-00765	Flt Test Support to Risk Focus Team for Sierra Nevada Drop Test
TI-15-01106	Fluid Structure Interaction in Prediction of Parachute Performance
TI-19-01434	FPMU Data Processing Algorithm Development and Analysis Assessment
TI-16-01114	Fracture and Reliability of Propulsion/ECLSS Valve Bellows Seals
TI-11-00691	Fracture Control Standard and Handbook (NASA-STD-5019A)
TI-21-01646	Frangible Joint Technical Support to LSP
TI-21-01645	Frangible Joint Technical Support to SLS
TI-21-01692	Frangible Joint Working Group
TI-08-00470	FSM-15 Propellant Liner Insulation Void Investigation Senior Review Board
TI-17-01217	Full Independent Verification of SLS Ascent Loads
TI-21-01640	Galvanic Corrosion in Microfabricated Detectors and MEMs Devices
TI-19-01424	Gas Generator (GG) Baffle Design and Analysis
TI-21-01683	Gateway PPE COPV Damage Tolerance Life Support
TI-21-01634	Gateway Type 2 D&C Standards ESA Equivalents Adjudication Plan
TI-15-01072	GEDI Laser Side-Lobes Review Team Chair
TI-15-01039	GEER Independent Review
TI-04-00067	Genesis Reentry Observation
TI-04-00048	GENESIS Space Capsule Return/Recovery
TI-05-00121	GH2 Vent Arm Behavior Prediction Model Review

TI-08-00472	GLAST Star Tracker Lightshade Problem IRT Activity
TI-11-00709	Global Observer Mishap Resolution
TI-18-01369	GOES S Loop Heat Pipe Anomaly Support
TI-12-00828	GOES-R Ithaco Reaction Wheel Assembly Technical Support
TI-18-01393	Grace Follow-On (GFO) Microwave Instrument (MWI) Instrument Processor Unit
TI-14-00944	Ground Operations Human Factors Task Analysis
TI-14-00923	Ground Testing to Assess the ISS Ultrasonic Leak Location Concept
TI-13-00917	Ground Wind Loads Uncertainty for Mars Insight Lander
TI-12-00837	GSDO Emergency Egress System (EES) Assessment
TI-05-00120	GSE T-0 Umbilical to SSP Flight Element Assessment
TI-07-00432	GSFC Avionics Architecture Proposal Independent Review
TI-09-00555	GUCP Investigation Team
TI-19-01489	Guidelines for an Avionics Radiation Hardness Assurance
TI-18-01330	Guidelines for Battery Thermal Runaway on Robotic Missions
TI-20-01510	HALO, DSG, NASA; Technical Standards Evaluation and Streamlining Approach
TI-22-01757	Hardline O2 and Fire Response
TI-20-01523	Hardware Development for COVID Applications
TI-10-00631	Hayabusa Sample Return Reentry Observation
TI-20-01584	Helium Evolution from Helium-Saturated Hypergolic Propellants
TI-21-01703	Helium Solubility in MMH and NTO
TI-10-00676	High Strain Rate Fracture of SSP Orbiter OMS/RCS Thruster
TI-07-00408	High-Pressure Oxygen Feasibility and Safety
TI-22-01726	HLS Avionics Fault Tolerance Support Request
TI-20-01514	Honeywell MIMU Operational Life Investigation
TI-10-00638	Honeywell Reaction Wheel Assembly Lubricant Contamination
TI-21-01630	Honeywell Reaction Wheel Bearing Contamination
TI-21-01642	Hot Gas Intrusion in Falcon 9 Engine Bays
TI-21-01708	Hot-Fire Testing of 5 lbf Class Reaction Control System Thrusters
TI-05-00123	HPOTP Knife edge Seals
TI-15-01105	HST Gyro 1 & Gyro 2 Elevated Motor Current Investigation Support
TI-12-00763	HST Gyroscope Anomaly and Reliability Investigation in Support of an Updated Management Plan
TI-08-00486	HST Independent Review Team - SDF Spare
TI-04-00066	HST Life-Limiting Item Review
TI-04-00052	HST Robotic Servicing Mission Concept Review
TI-04-00055	HST Robotic Servicing Mission/Battery White Paper
TI-18-01400	Hubble Space Telescope (HST) Gyro-3 Anomalous Rate Output
TI-13-00868	Hubble Space Telescope (HST) System Reliability Review
TI-18-01368	Human Error Analysis Guide
TI-20-01506	Human Exploration and Operations Program Status Assessment (Loverro)
TI-10-00672	Human Exploration Framework Team Support
TI-17-01274	Human Factors Analysis of Test Stand Operations
TI-13-00887	Human Factors Review of SGSS Project

TI-20-01533	Human Factors Support for OSAM-1
TI-20-01601	Human Factors Support for the OCE Project Factors Team
TI-18-01304	Human performance contributions to safety in commercial aviation
TI-12-00845	Human Research Program?s ?Risk of Injury from Dynamic Loads?
TI-12-00823	Human Spaceflight-1 Mishap Recurring Factor Study
TI-17-01224	Human System Gap Analysis for Low Boom Supersonic X-Plane
TI-18-01334	Human Systems Integration for Safety-Critical Range Operations at WFF
TI-14-00936	Human Vibration Modeling for MPCV Coupled Loads Analysis
TI-08-00452	HyBoLT Aero-acoustics for the ALV-X1 Launch Vehicle
TI-20-01622	Hydrazine Hydrate Analysis
TI-18-01308	Hydrodynamics Support for the Orion CM Uprighting System
TI-19-01488	Hypervelocity Impact (HVI) Testing of Kevlar KM2+
TI-12-00846	ICESat-II Laser Pointing
TI-10-00632	Icing Research Tunnel Force Measurement System
TI-13-00886	IM Design Study for Lightweight Reentry Vehicle
TI-20-01519	Impact of Boeing Software Issues on Orion/SLS
TI-12-00790	Impact of NASA Arc Jet Complex Consolidation on MPCV&TPS Margins
TI-04-00091	Impact of Unsteady Loads on the Tail Appendages of the ASDS Vehicle
TI-20-01610	Impacts of Reduced Pressure Atmospheres on Environmental Control and Life
TI-15-01097	Improved Design and Optimization of Complex Trajectories
TI-18-01309	Improvements to the Flight Analysis and Simulation Tool (FAST)
TI-15-01031	Inconel 718 Additive Manufacturing (AM) Mechanical Property Investigation
TI-04-00079	Inconel 718 Fatigue Growth Tests in Liquid Hydrogen
TI-04-00050	Independent Analysis of CMG to FSE interface capability for SSP
TI-18-01341	Independent Anomaly Review of RD-180
TI-14-00965	Independent Assessment of the Backshell Pressure Field for MEDLI 2 (Mars 2020)
TI-12-00791	Independent Assessment of the Maxwell SBC Panels
TI-18-01342	Independent Assessment of the Spacecraft Air Monitor (SAM) system
TI-20-01509	Independent Assessment of the Technical Maturity of NEP and NTP Systems
TI-20-01603	Independent Assessment of Zero-g Propellant Gauging Technology Technologies
TI-20-01520	Independent Assessment Study for the GSFC LISA Laser
TI-16-01112	Independent Crew Vibration and Shock Requirements and Compliance Assessment
TI-06-00330	Independent Hydrazine Sublimation Calculation for APU 1 Fuel Tank
TI-17-01272	Independent Materials Expert Review of Parker Solar Probe C103 Niobium Sublimation Model
TI-12-00836	Independent Modeling and Simulation for CCP EDL
TI-19-01432	Independent Models of the SLS Hydrogen and Oxygen Pressurization Systems
TI-16-01160	Independent Peer Review of GSDO/SLS Umbilical Modeling
TI-15-01078	Independent Review of Additive Manufacturing Development Plans
TI-20-01599	Independent Review of Additively Manufactured Materials for xEVA
TI-18-01299	Independent Review of AFRC Bldg 703 Fire Suppression System Failure
TI-19-01441	Independent Review of Analysis to Support Midpoint Monitoring in Batteries
TI-09-00602	Independent Review of Ares I Control Sensitivity to Orion SM Tank Slosh Dynamics Model

TI-19-01480	Independent Review of CFM Feasibility Assessment for NTP
TI-10-00635	Independent Review of CoNNeCT Antenna Gimbal Structural Analysis
TI-09-00544	Independent Review of RFCS White Paper
TI-09-00592	Independent Review of US & Russian PRAs for MRM2 MMOD Risk
TI-06-00338	Independent Review Support for Phoenix Mission Robotic Arm Brush Motor Failure
TI-20-01621	Independent SMEs for DOLILU Certification Review
TI-21-01685	Independent Technical Assessment of NASA Quantum Sensing Capability
TI-15-01080	Independent Verification of Abort Loads
TI-16-01128	Independent Verification of SLS Block 1 Pre-Launch, Liftoff, and Ascent Gust Methodology and Loads
TI-07-00427	Independent/Additional Analysis of Ullage Collapse Concern During Separation
TI-15-01016	Infrared Laser Sensor Technology Readiness & Maturation
TI-06-00297	Insight into CLV Preliminary Design Concepts Assessment
TI-18-01408	Instrument UV Coating Review
TI-12-00824	Instrumentation for ISS On Orbit NDE
TI-07-00395	Integrated COPV Technical Issues
TI-06-00368	Integrated Design Center and Team Collaboration Lessons Learned
TI-10-00678	Invest. of the Effect of Drogue Parachutes on Orion Dynamics
TI-05-00166	Investigation of STS-114 Foam Debris Anomalies
TI-14-00962	Investigation of uPSP and a Dynamic Loads Balance to Predict Launch Vehicle Buffet Environments
TI-11-00731	IPCE Study of Moving Selected Italian Arc Jet Segments to ARC
TI-05-00273	IRT for Phoenix Mission Terminal Descent Thruster Certification
TI-10-00622	ISO Technology Readiness and Control System Handbooks
TI-04-00016	ISS - Improved Methods for Air Leak Detection
TI-11-00740	ISS Air Quality Monitoring System Assessment
TI-13-00872	ISS Ammonia Leak Location: Assess. of Sensing Technologies
TI-14-00950	ISS Anomalies Trending Study
TI-07-00416	ISS Attitude Control Issues
TI-19-01500	ISS Battery Charge Discharge Unit Flight Anomaly Investigation Support
TI-18-01370	ISS Cargo Tool Loads Analysis - Independent Verification and Validation
TI-15-01099	ISS CDRA Blower Speed Range Extension
TI-05-00149	ISS CDRA Heat Exchanger Mishap Investigation
TI-04-00046	ISS CMG Failure
TI-10-00687	ISS CMG Performance Investigation
TI-14-01004	ISS Columbus Module Moderate Temperature IFHX Temperature Response Test
TI-11-00689	ISS Control Moment Gyroscope Bearing Containment Assessment
TI-14-00941	ISS EVA Water Anomaly and EVA Recovery Team Failure Investigation
TI-06-00290	ISS External TV Camera Shutdown Investigation
TI-20-01606	ISS FGB Air Leak
TI-05-00146	ISS Fiber Optic Workmanship
TI-06-00314	ISS IATCS Coolant Remediation System Requirements & Test Plan Review
TI-09-00538	ISS Nitrogen/Oxygen Recharge System COPV Concept
TI-10-00607	ISS Node 3 Ammonia Line Flex Hose Failure

TI-10-00629	ISS On-Orbit Background Ultrasonic Noise Measurements SDTO
TI-12-00778	ISS Orbital Replaceable Unit (ORU) Wet Storage Risk Assessment
TI-14-01006	ISS Plasma Contactor Unit Utilization Plan Assessment Follow-on
TI-13-00869	ISS Plasma Contactor Unit Utilization Plan Assessment Update
TI-16-01108	ISS Plasma Interaction Model Independent Review
TI-09-00529	ISS Radiator Face Sheet Damage
TI-17-01269	ISS Research Activities Outside the Microgravity Science Glovebox (MSG)
TI-06-00366	ISS RJMC Anomaly Consultation
TI-17-01275	ISS RPCM Hot Mate/Demate During EVA
TI-10-00627	ISS Sabatier Assembly
TI-06-00316	ISS S-Band Corona Discharge Anomaly
TI-06-00363	ISS S-Band Forward Link Anomaly (String-1)
TI-12-00798	ISS Simplified Docking System
TI-07-00433	ISS Solar Alpha Rotary Joint Issue
TI-06-00332	ISS Solar Array Wing Longeron Shadowing Report
TI-22-01727	ISS Universal Waste Management System (UWMS) Optical Sensor
TI-09-00533	ISS Urine Processor Assembly Distillation Assembly TTE Support
TI-13-00908	ISS US-EVA-23 EMU Anomaly Mishap Investigation Board
TI-08-00479	ISS Water Recovery System Independent Assessment Team
TI-14-00942	ISS/EVA Lithium-Ion Battery Thermal Runaway Severity Reduction Measures Assessment
TI-04-00039	ISS/Shuttle "Flip" Maneuver for TPS Repair
TI-19-01470	Issues with Qualification of Radiographic NDE Techniques
TI-07-00383	J2X Engine Design for Exemption of Fault Tolerance Requirement
TI-08-00446	James Webb Space Telescope Motor Anomaly
TI-16-01157	JPL Battery Failure Study
TI-14-00948	JPSS MMOD Assessment
TI-12-00842	JPSS Program ATMS Scan Drive Motor Anomaly Review Board
TI-14-01001	Jr-A Methodology Crack Instability Analysis Capability into WARP-3D Code
TI-17-01202	Juno Check Valve Anomaly - Recovery Assessment
TI-07-00431	JWST Electrical Cable Protection
TI-11-00745	JWST Fine Guidance Sensor Motor Anomaly Support
TI-12-00827	JWST NIRSpec Micro Shutter Alternate Materials and Coatings
TI-11-00701	JWST NIRSpec Micro Shutter Subsystem
TI-16-01113	JWST Shaker Anomaly
TI-15-01079	JWST Space Environment Launch Constraints
TI-09-00561	JWST Sunshield Venting Analysis Assessment
TI-08-00455	Kepler Reaction Wheel Usage Plan Independent Assessment
TI-10-00610	Kepler Recurring Anomalies Investigation
TI-13-00881	Kepler Spacecraft Hybrid Attitude Control Concepts Evaluation
TI-22-01754	KSC Center-wide GN2 Supply Issue During Artemis I Wet Dress Rehearsals
TI-14-00960	KSC Crawler Casting Water Intrusion
TI-08-00500	KSC Cryo Testbed Mishap Investigation Team Support

TI-05-00139	KSC Pad B Catenary Capability Analysis & TEM Support
TI-04-00040	KSC PC GOAL System Data Integrity
TI-06-00349	KSC VAB Quantity-Distance Modeling Effort
TI-10-00662	L1L Thruster Investigation Support
TI-09-00551	Land-Based Infrared Imaging in Support of STS-125 Entry (Phase B)
TI-20-01579	LaRC Transonic Dynamic Tunnel Corrective Actions Review
TI-19-01416	Large Male ATD Model Correlation Improvement
TI-10-00626	LAS ACM Valve Control System
TI-16-01132	Laser Risk Assessment; Q-Switch Final Briefing Advanced Topographic Laser Altimeter System
TI-08-00450	Launch Abort System Motor Qualification
TI-07-00415	Launch Abort System Risk Mitigation
TI-10-00625	Launch Abort Systems Risk Mitigation
TI-17-01294	Launch Availability Model Independent Assessment
TI-10-00615	LAV Transonic Stability Augmentation
TI-14-01005	Layered Pressure Vessel Technical Consultation
TI-20-01613	LC-39A Pad Modification Evaluation
TI-22-01733	Lessons Learned on Possible Incompatibility DART with its NEXT-C Ion Engine
TI-18-01374	Liftoff Modeling and Simulation of TO Umbilicals for Space Launch System
TI-09-00593	Lightweight Installable MMOD Shield Concepts for ISS Modules
TI-17-01262	Likelihood Scoring of ESD Risk 12631 for EM1 and EM 2
TI-07-00439	Linguistic Preprocessing & Tagging for Problem Report Trend Analysis
TI-16-01184	Liquid Apogee Engine Failures Assessment
TI-05-00136	Liquid Hydrogen Vent Line Tanking Test Instrumentation Peer Review
TI-18-01337	Liquid Methane/LOX explosion characterization planning peer review
TI-10-00670	Liquid/Solid Rocket Study
TI-06-00343	Loads & Dynamics Technical Area Consultation for CxP
TI-21-01701	Low Temperature Coefficient of Thermal Expansion Measurement Capability
TI-07-00394	LSAM Smart Buyer Project Support
TI-11-00706	Lunar Atmosphere Dust Environment Explorer GN&C Parameters
TI-06-00350	Lunar Dust Safety
TI-22-01747	Lunar Ground Testing Guidebook Support
TI-18-01406	Lunar Lander Mentor Team
TI-20-01576	Lunar Meteoroid Ejecta Model Review
TI-11-00742	Lunar Reconnaissance Orbiter (LRO) RWA Anomaly
TI-19-01471	Lunar-lander standing-acceleration limits standards development support
TI-15-01086	M&P Requirements for Space X Orbital Tube Weld Acceptance of Class A Welds
TI-12-00775	M&S of System Behavior at SLS/MPCV/GSDO Interfaces
TI-18-01307	M2020 MEDA SkyCam EGSE Analysis
TI-18-01405	MAF Manufacturing and Integration Technical Support
TI-18-01381	MAF Nonconformance Reporting and Corrective Action Technical Support
TI-20-01570	Mars 2020 Sample Tube Cracking
TI-19-01473	Mars 2020 Wheel/Flexure Stiffness and Strain Capacity Support

TI-03-00004	Mars Exploration Rover (MER) Flight Operations
TI-21-01637	Mars Sample Return CCRS Mass Tiger Team Support
TI-21-01633	Mars Sample Return MMOD Protection Review
TI-18-01383	Material Compatibility and EAC Data for Metals in Hypergolic Propellants
TI-17-01198	Material Compatibility for Orion Propulsion Bellows
TI-21-01699	Materials and Processes Selection Criteria for Lunar Construction
TI-12-00755	Materials Expertise for Temporary Urine and Brine Stowage System
TI-21-01711	Materials Expertise Support for Lucy Project ART Kevlar Lanyard testing
TI-21-01707	Materials SME for MMPACT Review
TI-19-01487	Materials Support to DC-8 Type A Mishap
TI-17-01197	Materials TDT Support for Orion CMUS
TI-05-00116	Math Model Tools to be Used to Assess Damage to Tile & RCC Due to Debris Impact Assessment
TI-20-01617	MAV Buffet / Aeroacoustics Numerical Simulations
TI-20-01600	MAV Mass Properties and Mass Growth Implementation and Margin Refinement
TI-14-01014	Maxwell SBC Panels (Lot 2 - DC 1401)
TI-18-01298	MDP Transient Assessment
TI-20-01564	Medical Ceramic Oxygen Generator (M-COG)
TI-18-01375	Micro-Thrusters for Low-Jitter Space Observatory Precision Attitude Control
TI-13-00854	Minimum Wear Life for the ISS PCVP Rotor Bearing System
TI-11-00752	MISSE-X Review Board Support
TI-08-00449	MLAS Parachute Experiment
TI-08-00459	MLAS Technology Demonstration - SiSP
TI-09-00532	MLAS Visual Imagery Demonstration
TI-07-00424	MLCC - Low Voltage Failure Phenomenon
TI-12-00780	MMOD Design and Analysis Improvements
TI-04-00056	MMOD Model called "Bumper"
TI-14-01003	MMOD Pressure Vessel Failure Criteria
TI-14-00925	MMS High Voltage Optocoupler Assessment
TI-09-00547	Mobile Launch Platform Stabilization for Ares 1-X
TI-18-01394	Mobile Launcher Independent Model Verification
TI-12-00833	Modal Mass Acceleration Curve Loads Analysis Methodology
TI-14-00967	Model of SLS/MPCV/GSDO Stack on the Pad
TI-13-00870	Modeling and Simulation of System Behavior at GSDO Interfaces
TI-18-01390	Modeling, Testing, and Analysis for Investigation into COPV Liner Leaks
TI-21-01636	Moisture in Active Thermal Coolant
TI-15-01067	MOMA WRP QM FRB Support
TI-21-01647	Motion Magnification for Gimbaled Bellows
TI-13-00909	MPCV Avcoat Study
TI-20-01604	MPCV COPV Damage Tolerance Life by Analysis Risk Assessment
TI-13-00907	MPCV Crew Module Orbital Tube Weld Computed Radiography Assessment
TI-12-00832	MPCV Heatshield Carrier Structure Alternate Design
TI-21-01641	MPCV Launch Abort Vehicle Powered Aero Database Development using FUN3D

TI-15-01022	MPCV Organizational Safety Assessment Technical Support
TI-14-00951	MPCV Program Window Wavefront Measurement Capability Development
TI-19-01481	MPCV Welded Coupon Autofrettage Crack Growth Tests
TI-15-01066	MSFC Additive Manufacturing Specification Review
TI-18-01365	MSFC Engineering/SMA Support for Uncertainty Quantification (UQ) Evaluation
TI-09-00525	MSL Actuator Anomaly Support
TI-10-00613	MSL Aero/RCS Interaction Model Validation
TI-11-00736	MSL Ground Test and Checkout Technical Support
TI-10-00616	MSL Loads, Structures, & Mechanical Review
TI-21-01674	MSR EEV Dynamic Stability Assessment
TI-14-01013	Multi-Purpose Oxygen Generators Swelling
TI-20-01592	NAFTU Software Independent Engineering Review Request
TI-06-00357	NASA Aerospace Flight Battery Program
TI-06-00360	NASA Broadband Aeroacoustic Stator Simulation (BASS)
TI-16-01172	NASA Docking System Non-Compliance Review
TI-22-01739	NASA Exploration Systems Maintainability Standards for Artemis and Beyond
TI-09-00606	NASA Handbook for Models and Simulations (NASA-STD-7009)
TI-15-01027	NASA SBIR/STTR Program Final Proposal Review Support
TI-10-00661	NASA Support to Trapped Chilean Miners
TI-09-00565	NASA Thermal Performance Database
TI-13-00856	NASA Workshop on Hybrid (Mixed-Actuator) Spacecraft Attitude Control
TI-19-01428	NASCAP Integrated Spacecraft Charging Analysis Support
TI-05-00130	Naval Safety Center Report/Findings (`96) of JSC Training Facilities
TI-17-01283	Navigation Doppler Lidar - peer review
TI-04-00038	NDE for ETTPS Closeout Verification
TI-04-00031	NDE Method for Navy Interest
TI-07-00409	NDE POD for Casting Cracks In Investment Cast Critical Metallic Structures
TI-17-01266	NDE Support for SLS Weld Anomalies
TI-18-01387	Need for Wireless EDL Instrumentation Validation
TI-15-01033	NESC Assessment of AA-2 Downgrade
TI-21-01650	NESC Assessment of MAIA's Proposed Propulsion System
TI-21-01639	NESC COG Technology Development
TI-13-00867	NESC Materials, Structures, NDE Consulting Support for ISS MMOD
TI-14-00945	NESC Modeling of Crawler/Transporter (CT), Mobile Launcher (ML), and Forcing Functions
TI-22-01749	NESC PDV System Repair and Modernization
TI-16-01110	NESC Peer Review of ESD Integrated Vehicle Modal Test, Model Correlation, DFI and Flight Loads Readiness
TI-12-00760	NESC Representation on CPST MCR Board
TI-13-00858	NESC Support for Amptek HV801 device on the MMS FPI Instrument
TI-13-00880	NESC Support for Evaluation of NDE on SNC Composite Specimens
TI-19-01410	NESC Support of Pegasus ICON Mission
TI-19-01430	NESC Support of SpaceX Dragon Anomaly
TI-18-01403	NESC Support to CCP Acoustic Emission Measurements

TI-18-01295	NESC Support to CCP COPV 2.0
TI-06-00292	NESC Support to Crew Launch Vehicle (CLV)
TI-10-00618	NESC Support to NHTSA Toyota Sudden Accel Investig
TI-18-01401	NESC Support to the GOES 17 MIB
TI-13-00921	NESC Support to the ISS Coolant Loop Anomaly
TI-19-01413	NESC Technical Support to LaRC OIG
TI-05-00271	New Method for Updating Mean Time Between Failure
TI-20-01616	New Methods for Removal of Cadmium from High Purity Hydrazine
TI-11-00748	NFIRE Satellite Support
TI-10-00684	Nickel-Titanium Superelastic Rolling Element Bearings Assessment
TI-16-01125	NISAR MMOD
TI-07-00386	NOAA N`Spacecraft Mishap Investigation Board
TI-11-00741	NOFBX Demonstration on ISS
TI-14-00992	Nonlinear Slosh Damping Analysis for Launch Vehicles
TI-17-01257	NOVICE Support to LSP and CCP Radiation Assessment
TI-09-00501	NPOESS VIIRS Instrument Mechanism Investigation Support
TI-11-00730	NPP Solar Array Deployment Torque Margin
TI-07-00398	NSI Independent Review for Phoenix Project
TI-19-01436	Occupant Protection Testing
TI-20-01563	Ocean Color Instrument (OCI) Engineering Test Unit Anomaly (ETU)
TI-19-01499	OFT Entry Risk Assessment
TI-20-01597	Operational Modal Analysis of Dynamic Rollout Test Data
TI-14-01007	ORB-3 Independent Review Team Support
TI-10-00628	Orbital Express Rendezvous Lessons Learned
TI-10-00637	Orbital Sciences Corporation
TI-10-00667	Orbiter Base Heat Shield Main Engine Ignition Acoustic Env.
TI-04-00082	Orbiter Body Flap Actuator
TI-04-00053	Orbiter Flexhose Corrosion
TI-06-00311	Orbiter Fuel Cell Mishap Investigation Board
TI-06-00298	Orbiter Radiator Retract Assembly Flexhose Cracking
TI-04-00064	Orbiter RCC Wing Leading Edge Attach H/W Integrity
TI-04-00043	Orbiter Reaction Jet Drivers (RJD) (wire to wire short)
TI-03-00003	Orbiter Rudder/Speed Brake actuator Braycote grease concern
TI-05-00111	Orbiter Rudder/Speedbrake PDU Gearbox Backdriving/Scuffing
TI-04-00044	Orbiter Thrusters (Mounting Flange Bolt Holes)
TI-07-00399	Orbiter Wing Leading Edge RCC Panel Subsurface Anomaly
TI-19-01478	Orion - Super Guppy Loads Issue
TI-09-00540	Orion Ascent Abort-1 Loads Assessment
TI-16-01177	Orion CM Well Deck Recovery Conditions Dynamics Analysis
TI-17-01258	ORION CM/SM Separation Bolt Life issue
TI-11-00747	Orion CM-SM Umbilical Strut Vibration Testing
TI-18-01335	Orion Crew Module Recovery During Underway Testing and EM-1

TI-19-01491	Orion Crew Module Side Hatch Analysis
TI-18-01392	Orion Crew Module/Service Module Separation Nut Test Fixture Failure
TI-11-00733	Orion DMJS SeparationTesting
TI-14-00989	Orion ECLSS Assessment
TI-18-01333	Orion Exploration Mission - 2 (EM-2) Spectrometer
TI-11-00705	Orion Flight Test-1 Radiometer Feasibility Study
TI-20-01530	Orion Frangible Joint Threshold and Margin Analysis
TI-11-00699	Orion Launch Abort System C/C-SiC Material Behavior
TI-09-00604	Orion Launch Abort Vehicle Jet Interaction Aerodynamics
TI-07-00438	Orion Modeling Occupant Injury Assessment
TI-15-01087	Orion MPCV GN&C FDIR Independent Review
TI-09-00531	Orion Pad Abort-1 Environments TIM
TI-17-01247	Orion Propellant Gauging
TI-22-01745	Orion Reusability Evaluation Support
TI-16-01190	Orion Simulator Risk Assessment
TI-16-01167	Orion SIMULINK GNC Code Generation
TI-07-00430	Orion Software Performance Assessment
TI-19-01415	Orion Spacecraft Low-g Slosh Performance and Stability Impact Investigation
TI-19-01411	Orion Tantalum Capacitor Failures Investigation Support
TI-12-00764	Orion Thermal Protection System (TPS) Margin Study (Phase II)
TI-15-01043	Orion Titanium Hydrazine Tank Weld - Environmentally Assisted Cracking
TI-11-00698	Orion TPS Margin Study
TI-19-01435	Orion, NDSB2, and Gateway Material Electrical Properties Support
TI-09-00526	Orion/MSL EDL Engineering Workshop
TI-13-00885	OSIRIS-REx Asteroid Touch-and-Go Onboard Navigation Capability
TI-05-00267	OV-105 Rudder Speed Brake Conical Seal Panel Pitting Repair
TI-06-00323	Oxygen Generation System Independent Design Review
TI-09-00601	Pad Abort-1 Controller Board Failure Investigation Support
TI-05-00283	PAE Assessment of GRC Readiness for LOX/Methane Propulsion System Technology Development
TI-05-00269	PAL Ramp Removal Feasibility Assessment
TI-18-01404	PAMELA Radiation Data Recovery Technical Support
TI-21-01644	Parachute Dispersion Bridle Load Link Technical Evaluation Phase-1
TI-16-01169	Parachute Modeling Capability Gap Discussions Support
TI-18-01396	Parachute Reefing Line Cutter Modification and Qualification
TI-19-01419	Parker EPR E0515 O-Ring Material Obsolescence
TI-16-01117	Parts-level vs. Board-level and Box-level Screening Testing
TI-19-01439	Peer Review of CST-100 CM battery design and Submission of 5x5 Risk Scoring
TI-10-00674	Peer Review of Launch Environments Assessment
TI-12-00754	Peer Review of Orion EFT-1 Landing and Recovery Planning
TI-18-01302	Peer Review of Parker Solar Probe (PSP) GN&C Verification Test Case Status
TI-14-00946	Peer Review of SLS, GSDO, and MPCV Programs' Modal Test, Development Flight Instrumentation, and Dynamic Model Correlation Plans
TI-21-01625	Peer Review of Solder Operations for the Mars Sample Return Mission

TI-09-00506	Peer Review of SSP Orbiter Project MPS GH2 FCV Poppet Cracking Flight Rationale
TI-05-00286	Peer Review of the MPCV Aerodynamic/Aerothermal Database Models and Methods
TI-16-01163	Peer Review on Wind Induced Oscillation
TI-19-01431	Peer Review Support for NIRVSS FPGA
TI-07-00381	Pegasus Stage 2 Ignition Transient Peer Review
TI-11-00710	Penetrant POD Limit Implementation on Orion CM Prop Tank
TI-15-01090	Peregrine Sounding Rocket Redesign
TI-04-00106	Performance of Loctite as Secondary Locking Feature for ISS Fasteners
TI-13-00914	Phase III - ACM C/C-SiC Component Performance Testing Approach for Certification
TI-10-00659	Phase V-5 In-Suit Light Exercise (ISLE) Prebreathe Protocol
TI-22-01728	Phased Array Microphone System Development
TI-11-00751	Phobus Grunt Technical Support
TI-05-00281	Phoenix Mission Primary Structure Margins Review
TI-18-01320	Pilot Breathing Assessment
TI-08-00444	Pilot Study on Probabilistic Design of Failure-Resistant Systems.
TI-07-00404	Planar Laser-Induced Fluorescence: A Window into the Behavior of Hypersonic Flows
TI-04-00065	PLD/FPGA Devices IV&V Proposal
TI-15-01095	Plumbrook 6-DOF Shaker Table Support
TI-14-00995	Portable Fire Extinguisher (PFE) Evaluation
TI-03-00002	Possible deficiencies in predicting transonic aerodynamics on the X-43 A
TI-16-01168	Potential Common-Cause Controller System Issues: Plumbrook MVF and GSFC JWST Systems
TI-21-01719	Power and Propulsion Element (PPE) Battery Safety Assessment and Pathfinder
TI-18-01318	Power Electronics Technical Support for Electric Propulsion
TI-09-00505	Power MOSFET Thermal Instability Operation Characterization Support
TI-05-00277	Power Outage at the Goldstone Facility
TI-05-00137	Prebreath Protocol for Extra-Vehicular Activity
TI-21-01714	Pressurized Rover Red Team Review, JAXA and NASA Concepts
TI-08-00499	Probabilistic Design Opportunity Identification
TI-10-00611	Probabilistic Design Study
TI-07-00400	Problem Reporting Taxonomy & Data Preparation Tool Evaluation
TI-22-01748	Programmable Logic Device (PLD) Guidance and Standard
TI-04-00045	Programmed Antifuse Reliability Evaluation
TI-16-01118	Proof Factors for Composite Overwrapped Pressure Vessels
TI-17-01251	Propellant Tank Safe-Life Analysis
TI-10-00614	Pryo Valve Reliability Assessment for ELV Payloads
TI-22-01740	Psyche Mission RAD750-V3 Failure
TI-07-00426	PTFE (Teflon) Wire Integrity/Embrittlement in an Ionizing Radiation Environment
TI-09-00596	Pyrovalve Booster Interface Temperature Measurement
TI-14-00997	Rad750 Qualification Testing
TI-17-01211	Radiation Single Event Effects Impact on Complex Avionics Architecture Reliability
TI-12-00802	Rapid Design and Development Project Best Practices White Paper
TI-16-01129	Rapid Slews for Lunar Reconnaissance Orbiter

TI-14-00933	Raven Impact on ISS Visiting Vehicles
TI-04-00049	RCC Impact Team "Follow Along"
TI-07-00403	Reacting Multi-Species Gas Capability for USM3D Flow Solver
TI-12-00830	Reaction Wheel Performance for NASA Missions
TI-10-00619	Readiness for Crewed Flight Operations
TI-17-01264	Re-Architecting the NASA Wire Derating Approach for Human Space Flight Applications
TI-19-01490	Recommendations on Use of COTS Guidance for NASA Missions
TI-05-00135	Recovery Plan for EMU & ISS Airlock Coolant Loop Review for RTF
TI-04-00009	Recurring Anomalies in the Space Shuttle and ISS Programs
TI-09-00595	Reducing Risk Associated with Vibroacoustic Environments
TI-07-00389	Reduction in Pressure Vessel Factor of Safety
TI-07-00414	Re-Entry Heat Effects Characterization on OMS Pod Structure
TI-20-01503	Reference Architecture for ISS and Exploration EVA Power System
TI-19-01438	Reimbursable Technical Support for DARPA's Experimental Space Plane (XSP)
TI-11-00753	Relative Navigation Rendezvous Sensor DTO Performance Evaluation
TI-05-00280	Reliability and Redundancy Trades
TI-04-00099	Reliability assessment of MIMU gyro for Mars Reconnaissance Orbiter and other missions
TI-09-00558	Reliability of Wide Range Pump on SAM Instrument
TI-18-01310	Reliable Method to Reason about Mass Growth
TI-20-01507	Remote Analog Interface Unit Dropout Anomaly
TI-12-00795	Remote Imaging of EFT-1 Entry Heating Risk Reduction
TI-16-01131	Replacement Material Evaluation for Kalrez 1045 Spacecraft Propulsion Component Seals
TI-17-01263	Report on the workshop "Dust in the Atmosphere of Mars and Its Impact on Human Exploration"
TI-14-00928	Request to Evaluate Moving Ground Vibration Laboratory (GVL) Capabilities from the VATF to the STL
TI-04-00023	Requirement for Post Proof NDE on ISS European Modules
TI-12-00756	Rev of NSTRF Proposals in Launch Propulsion Systems Tech (TA01)
TI-13-00874	Reverse Polarity Capacitor Installation Anomaly on the ISS ExPRESS ELC Simulator
TI-15-01083	Review Committee Support: Radiation Exposure Testing of Europa Clipper Composites
TI-08-00474	Review of AKGA Hydrazine Neutralizing Compound
TI-19-01421	Review of Boeing El Segundo's Additive Manufacturing Program
TI-08-00473	Review of Center Plans to Migrate to SI Units for Constellation
TI-16-01188	Review of Dynamic Power Convertor Proposals
TI-12-00826	Review of Environmental Satellite Options
TI-14-00929	Review of ESD Integrated Hazard Development Process
TI-20-01512	Review of Failure Analysis for SpaceX M1D Mainline Bellow Cracking Issue
TI-14-01008	Review of Fatigue Cycle-Counting/Fatigue Spectra Cycle Counting Methodology
TI-12-00757	Review of Green Propellant Research and Capability
TI-14-00938	Review of GSDO Tools for Verifying Command and Control Software
TI-10-00617	Review of JWST Cryocooler Disturbance Models
TI-11-00746	Review of LOC/LOM Model Validation for Commercial Crew
TI-08-00468	Review of Micrometeroid Environments Applied to Cx/CEV
TI-11-00734	Review of MOVE Type D Keyset Mishap Investigation Outcomes

TI-13-00882	Review of Occupant Protection Requirements
TI-18-01409	Review of ORDEM3.1
TI-15-01070	Review of Orion-ESM Interfaces
TI-09-00568	Review of Payload Vibro-Acoustic Test Criteria
TI-06-00365	Review of SDVR - Rotating Machinery Requirements
TI-14-00930	Review of SEXTANT and DSAC Technology Demonstration Projects
TI-10-00664	Review of Shuttle Carrier Aircraft Air Loads
TI-14-01015	Review of SLS Flight Software
TI-19-01440	Review of SLS FTS Battery Cell Out Test Procedure
TI-19-01467	Review of SLS SOW
TI-21-01648	Review of Spacesuit Electrical Models for Lunar Operations
TI-17-01203	Review of SpaceX Pad Abort Propellant Tank COPV Anomaly and Path Forward for Dragon 2
TI-15-01068	Review of Ultem 9085 Material Properties Characterization Document
TI-21-01704	Review support for Integrated RF and Optical Communications (IROC) project
TI-20-01538	Risk Evaluation of ABSL Moli-M Cell Lithium-Ion Batteries for L2 Missions
TI-14-01012	Risk Reduction of Orion Government-Furnished ECLS
TI-14-00994	Robonaut Battery Safety
TI-06-00362	Robust & Reliable GN&C System Architectures for Cx
TI-07-00435	Root Cause and Lessons Learned on the Solar Array Tear
TI-04-00097	Rotating Service Structure and Pad Review
TI-20-01574	Rotordynamic Analysis for Europa Clipper
TI-20-01588	RP-1 Leak Behavior Characterization
TI-17-01221	RS25 Thrust Oscillation in CLA and Fatigue Environments
TI-06-00303	RSB PDU Motor Dry Film Lubricant Bolt Issue
TI-04-00083	RSB System Level Test and Flight Certification
TI-04-00074	RSRM Nozzle Plylift
TI-06-00302	RTAX-S FPGA Risk Reduction
TI-04-00027	Rudder Speedbrake Gear Margins
TI-08-00458	S/W Support for Cx Ground Operations Project SRB
TI-20-01589	Safe Human Expeditions Beyond LEO
TI-17-01219	Safe, High Power Li-ion Battery Module Design
TI-14-00963	SAFER Battery Assessment
TI-14-00991	SAGE-III IAM Subsystem Anomaly
TI-19-01442	SE&I Support to CCP DCRs
TI-07-00419	Self Contained Oxygen Generator Failure Mechanisms Investigation
TI-22-01752	Self Reacting Friction Stir Weld (SR-FSW) Anomalies
TI-19-01422	Service Module (SM) Pressure Control Assembly (PCA) support
TI-04-00013	Shelf-Life Phenomenon for Graphite/Epoxy Overwrapped Pressure Vessels
TI-07-00379	Shell Buckling Knockdown Factor Proposal
TI-19-01497	Shock Prediction Advancement: Transient Finite Energy (TFE) Predictor
TI-18-01402	Shuttle Enterprise MLG Fracture
TI-06-00317	Shuttle Flight Infrared Measurements using WAVE & HALO II Airborne Sensors

TI-04-00020	Shuttle Kevlar COPV Safety for Flight Concern
TI-06-00294	Shuttle Launch and Ascent Debris Consultation
TI-09-00573	Shuttle Reaction Control Sys. Stinger Attach Point
TI-06-00310	Shuttle Tin Whiskers Consultation
TI-15-01017	Simplified Methodology to Estimate the Maximum LHe Cryostat Pressure from a Vacuum Jacket Failure
TI-09-00530	Simulation Framework for Rapid EDL Analysis
TI-12-00840	SLS Advanced Booster Composite Case/Internal PBI NBR Insulation Development
TI-12-00834	SLS Aerosciences Independent Consultation and Review
TI-17-01267	SLS Block 1B GN&C Design Review
TI-12-00839	SLS Block I Booster Insulation Characterization
TI-17-01282	SLS Booster Nozzle Throat Plug Debris
TI-21-01721	SLS Core Stage 2219-T87 Thick Plate Issue
TI-13-00877	SLS Electrical Power System Independent Review
TI-20-01511	SLS Flight Computer Anomaly
TI-16-01194	SLS Flight Software Source Code Review
TI-22-01738	SLS FTS Stray Voltage Anomaly
TI-15-01088	SLS Interim Cryogenic Propulsion Stage Frangible Joint Assembly Integral Manifold Attachment PDR Evaluation
TI-17-01216	SLS ISPE Modal Test Assistance
TI-17-01196	SLS Launch Vehicle Stage Adapter (LVSA) 2195 Cone Cracking Issue
TI-16-01155	SLS Liftoff Environment Models
TI-21-01638	SLS Prevalve Failure Assessment
TI-15-01044	SLS Program Block I Booster Element Alternate Internal Insulation Risk Reduction
TI-17-01248	SLS Pyro Firing Incident
TI-13-00865	SLS RS-25 Nozzle Flow Transient Acoustics Design Load Specification Refinement
TI-18-01377	SLS SE&I CoFR Support
TI-22-01736	SLS SE&I Programmatic Review, Support
TI-22-01741	SLS SPIE (Spacecraft/Payload Integration and Evolution) B1B CDR (Support)
TI-13-00851	SLS Uncertainty Management in Structural Design Evaluation
TI-15-01021	SLS Vibroacoustics Plans and Analysis Support (Follow-On)
TI-09-00504	SM ME Reboost Event
TI-19-01425	Small cryocooler Integration SME Technical Support Task
TI-11-00738	Small Payload Launch Vehicle Architecture Review
TI-13-00883	Small Spacecraft Technology CAN
TI-15-01082	SMAP Anomaly Circuit Investigation Support
TI-14-00961	SMAP RBA Deployment Risk
TI-12-00767	Smart Buyer Assessment for Winged Reusable Spacecraft
TI-18-01328	SME Support for DSG Early SE&I Review
TI-13-00916	SNC Dream Chaser Mishap Investigation
TI-04-00085	SOFIA Acoustical Resonance
TI-06-00341	SOFIA Cavity Door Drive System Independent Review Team
TI-13-00911	SOFIA Cryo Helium Dewar Heat Flux Evaluation
TI-13-00853	Solar Probe Plus Upper Stage Performance Assessment

TI-13-00864	Solar Probe Plus Water-Cooled Solar Array Peer Review
TI-19-01423	Solar Wind Radiation Damage of Metallic Coatings
TI-18-01336	Solderless Interconnects and Interposers
TI-17-01204	Southern Hemisphere Meteoroid Environment Measurements
TI-04-00042	Soyuz 7 Helium Leak
TI-19-01437	Soyuz Landing Reconstructions
TI-20-01562	Space Charging of Ocean Color Instrument (OCI) Rotating Mechanism
TI-13-00922	Space Launch System (SLS) Program Booster Element Qualification Motor (QM)-1 Aft Segment Unplanned/Unintended Event or Condition (UUEC) Investigation
TI-15-01102	Space Launch System Event-Based Certification Task
TI-19-01486	Space Launch System High Reynolds Number Testing
TI-13-00866	Space Launch System T-0 Vehicle Stabilization Loads Evaluation
TI-05-00114	Space Station to Shuttle Power Transfer System
TI-16-01159	Space Weather Action Plan Extreme Surface/Internal Charging Environment Benchmarks
TI-17-01215	Space Weather Architecture
TI-08-00481	Spacecraft Connector Selection Process
TI-21-01651	Spacecraft Fire Safety Standard
TI-12-00825	Spacecraft GN&C Component Open Source Benchmarking-ESA
TI-18-01323	Spacecraft Safety Equipment Assessment
TI-10-00668	Spacecraft System-Level Environmental Testing Needs
TI-07-00429	Space-Fibre Technology Demonstration
TI-21-01718	Space-Shielding Radiation Dosage Code Evaluation and Identification
TI-21-01628	SpaceVPX Interoperability Study
TI-21-01626	SpaceX Anomalous False Carriers On Ethernet Buses
TI-20-01582	SpaceX Corrosion Mitigation Strategy for Reuse
TI-18-01385	SpaceX CRS-15 Parachute Anomalies Investigation Support
TI-21-01720	SpaceX Dragon 2 Draco Thruster Proof Failure
TI-17-01200	SpaceX Dragon Capsule Dynamics in the NASA LaRC 20-Foot Vertical Spin Tunnel Assessment
TI-19-01484	SpaceX Dragon Water Landing Structural Design Reliability
TI-14-00949	SpaceX Electrical Power System Review
TI-16-01176	SpaceX Failure Investigation Support
TI-21-01691	SpaceX LF Regulator Debris Catcher Development
TI-11-00704	SpaceX Shock Test Specifications for Reusable Equipment
TI-12-00776	Spin Forming Al-Li CM Metallic Forward Pressure Vessel Bulkhead
TI-13-00884	Spin Forming CM Pressure Bulkhead Phase II, Aft Bulkhead and Cone
TI-15-01041	SPP: FIELDS Whip Antenna
TI-20-01531	Spx Drogue and Main Impact Damage Tolerance Evaluation
TI-20-01620	Spx Drogue and Main Impact Damage Tolerance Evaluation Phase 2
TI-21-01681	Spx Parachute Impact Damage Tolerance Evaluation - Phase 3
TI-04-00030	SRB BSM Contamination
TI-04-00077	SRB Hold-down Post Stud Hang-up
TI-10-00624	SRM Plume Impingement Loads Test
TI-09-00545	SSC A3 Engine Test Stand Vortex Shedding

TI-07-00420	SSC A3 Test Stand CFD; Vibrations & Safe Operations Support
TI-04-00028	SSP Debris Transport Peer Review
TI-12-00779	SSP Shock Test Experience for Reusable Flight Hardware
TI-07-00372	SSPTS Open PRACA Risk Evaluation
TI-17-01249	SSRMS Latching End Effector (LEE) Snare Cable Lubrication and Wire Breakage
TI-14-00964	Stability of the SLS Flight Control System with Adaptive Augmentation
TI-11-00708	Standard Reqts for Fire Protection Systems on Crewed Vehicles
TI-05-00151	Stardust Hypervelocity Entry Observing Campaign Support
TI-05-00140	Stardust Reviews
TI-20-01504	State of Hydrazine Synthesis and Its Potential Impact on Spaceflight Applic
TI-17-01293	State of In-Space Propellant Tanker/Transfer Technology
TI-15-01100	Static Software Analysis of the NASA Autonomous Flight Termination Software
TI-08-00447	Statistical Analysis of RSRM Silica Cloth Phenolic Material Properties
TI-04-00032	Statistical Analysis Support for ET Project
TI-20-01602	Statistical Design of Experiments Support for ICEE Formulation
TI-06-00345	Statistics Support for J2X Material Property Data
TI-15-01019	STMD Formulation of Extreme Environments Power Semiconductor Project
TI-17-01278	Stress Rupture of COPV Composites in LOX and RP-1
TI-13-00912	Stress Ruptures COPV
TI-09-00556	Structures Peer Review for Ares IX USS
TI-05-00154	STS-114 Engine Cut-off Sensor Anomaly Consultation
TI-06-00347	STS-115 Fuel Cell Motor Two-Phase Operation Evaluation
TI-07-00376	STS-117 Hail Repair Assessment
TI-07-00425	STS-118 Thermal Protection System Tile Damage Peer Review
TI-06-00334	STS-121 ET Ice/Frost Ramp Foam Loss
TI-06-00331	STS-121 Water Spray Boiler #3 Post Flight Assessment
TI-09-00552	STS-125 ASA Anomaly Investigation Support
TI-08-00496	STS-126 SRB Holddown Post Debris Containment Anomaly Resolution Team
TI-09-00562	STS-128 Orbiter Power Control Assembly Failure Investigation
TI-10-00680	STS-133/ET-137 External Tank Stringer Crack and Repair Assessment
TI-21-01702	Study of Material Sensitivities to N2O4/MON Exposure
TI-22-01732	SubC Safety Review Technical Support
TI-20-01619	Suborbital Crew; Qualification Approach and Risk Analysis Support
TI-17-01285	Super Resolution Post Processing of Air-to-Air Imagery of CCP High Altitude Parachute Test
TI-14-00998	Support Airborne Observation of ATV-5 Reentry
TI-22-01755	Support CCP, Engineering and Safety, Boeing Review Efforts
TI-08-00497	Support for Ares 1-X USS Vibro-Acoustic Protuberance Recovery Plan
TI-21-01680	Support for Balloon Program Flight Safety Risk Analysis
TI-17-01268	Support for Evaluation of SLS Program Polarity Testing Approach
TI-20-01580	Support for Fire Cartridge Failure Invest., Manufact., & Hardware Verific.
TI-08-00460	Support for Investigation of JWST Composite Joint Failure
TI-08-00466	Support for Investigation of the Radiator Retract Flexhose Buckling Issue

TI-20-01524	Support for NASA P-3B Aircraft Anomaly
TI-07-00391	Support for NSRS Assessment at KSC
TI-15-01040	Support for Orion Alternate Heatshield Study
TI-17-01289	Support for Sierra Nevada Dream Chaser TPS FDDR
TI-16-01193	Support for SLS Design Certification Review
TI-08-00467	Support for Soyuz Ballistic Entry Analysis
TI-17-01270	Support for SpaceX PTV6 parachute test anomalies investigation
TI-14-00993	Support for the Ames Arcjet Rectifier Snubber Failure Mishap
TI-20-01573	Support for the Boeing LAE Valves Fault Tolerance Variance Risk Assessment
TI-20-01505	Support for the CCP SuperDraco Pintle Erosion Investigation
TI-17-01212	Support in Conducting Atlas V Battery Hazard Test
TI-18-01329	Support Mars 2020 Heatshield Structural Failure Review
TI-18-01315	Support Mars 2020 Parachute Test at NASA Wallops
TI-07-00441	Support of ECO Sensor System Issues for Shuttle Program Duration
TI-21-01712	Support of LNG Detank Anomaly Investigation Team
TI-09-00541	Support of Mars Science Lab Thermal Team
TI-18-01338	Support of RRM3 Transfer Valve issue
TI-08-00480	Support of RSRM Investigation
TI-08-00476	Support of the Cx SR&QA Requirements Forum
TI-08-00475	Support of TIM for Evaluation of SSME Fuel Margins
TI-16-01127	Support Review of ESA Post Proof NDE Discussions
TI-05-00288	Support SAM Instrument Electronics Peer Review
TI-15-01018	Support Selection Process for NextSTEP
TI-05-00225	Support STS-114 Gap Filler Anomalies Tiger Team Investigation
TI-11-00700	Support the HST Attitude Observer Anomaly Review Board
TI-13-00859	Support to Aerospace Assessment of the ISS Li-Ion Battery
TI-13-00915	Support to ARM Robotic Concept Integration Team
TI-19-01493	Support to Blue Origin, New Glenn Launch Vehicle
TI-20-01502	Support to Boeing OFT Software Review
TI-20-01526	Support to CCP for Draco Design Modifications
TI-20-01614	Support to Complete Artemis xEMU Visor Inspection System Hardware
TI-11-00693	Support to Google Lunar X-Prize Site Recommendations
TI-20-01575	Support to GRC HV Fault/Transient Anomalies
TI-08-00495	Support to IET Design Review #3
TI-09-00599	Support to LOX Damper Peer Review
TI-17-01213	Support to LSP Hardware Re-Use Assessment
TI-15-01069	Support to NASA In-Space Manufacturing (ISM) Project
TI-14-00959	Support to NASA MagicDraw Cloud License Project
TI-14-00987	Support to NASA Standard 5009 Development
TI-09-00554	Support to SI C&DH Anomaly Resolution Board
TI-14-00926	T-38 Diverter Valve Grease Issue
TI-07-00412	Task 1 - Augmented Instrumentation Package (Orbiter BLT Testing for Development of Aeroheating Prediction Methodology)

TI-07-00413	Task 5: Remote Entry Imaging (Orbiter BLT Testing for Development of Aeroheating Prediction Methodology)
TI-11-00702	Taurus XL Glory Mishap Investigation Support
TI-19-01474	Tech Support for Advanced Weapons Elevator (AWE) CVN-78
TI-21-01700	Tech Support for NDL Risk Assessment Panel
TI-22-01734	Tech Support for OSAM-1 Assembly Joint Mechanism Test Failure
TI-21-01716	Tech Support for TALOS Project's Unexpected Venting
TI-19-01420	Technical Support for Active Mass Translator on Near-Earth Asteroid Scout
TI-21-01682	Technical Support for Ames Facility Electric Power Issues
TI-19-01492	Technical Support for Anaerobic Hydrogen Detection Sensor
TI-09-00549	Technical Support for Ares 1-Y Study
TI-20-01572	Technical Support for Boeing SM Thruster ATP Hot Fire Relaxation
TI-18-01388	Technical Support for Completion of NASA-HNBK-5010A
TI-17-01255	Technical Support for DARPA - TRADES Study
TI-20-01513	Technical Support for GOES-R Arcjet On-orbit Anomaly
TI-22-01737	Technical Support for Human System Interactions in Closed Breathing Systems
TI-20-01611	Technical Support for JPSS-2 SADA Life Test Failure
TI-21-01624	Technical Support for Orion Docking Mechanism Jettison System (DMJS)
TI-19-01485	Technical Support for Restore-L RPO and Kodiak Systems
TI-18-01407	Technical Support for Revising NASA-HDBK-4002A
TI-14-01002	Technical Support for SLS vibroacoustics plans and analysis
TI-20-01623	Technical Support for the GPM Mission Reaction Wheel Assembly Anomaly
TI-22-01750	Technical support of ESCAPADE Propulsion System Trade
TI-09-00600	Technical Support to External Tank 122 TIM
TI-15-01030	Technical Support to GSDO Landing & Recovery Trade Study for CM Recovery
TI-14-01009	Technical Support to Space Technology Mission Directorate (STMD) Brazing Tiger Team
TI-09-00553	Technical Support to SSP ET Project Foam Loss Events from STS-125 & STS-127
TI-14-00955	Technical Support to the MPCV CPAS Pendulum Assessment Team
TI-10-00671	Technology Roadmapping Support
TI-18-01376	TESS Fine Pointing Advisory Board Participation
TI-20-01618	Test and Modeling to Predict Spacesuit Water Membrane Evaporator Failures
TI-05-00142	Test Anomaly Resulting in Contamination of Elements of MRO Spacecraft
TI-12-00759	The use of comercial-off-the-shelf (COTS) electronic components
TI-17-01259	Thermocouple Interference During High-Speed Earth Entry
TI-21-01635	Thermophysical Properties of Liquid TEA-TEB
TI-08-00461	Third Party Review of Hydrazine System for STS-123 MMT
TI-05-00110	Threaded Fastener Guidance
TI-06-00358	Threaded Fastener System Design
TI-07-00428	TIMED Mishap Investigation
TI-20-01522	Ti-NTO Compatibility Cross-Program Impact and Lessons Learned
TI-15-01032	Tipping Point Technologies Support
TI-20-01525	Trade Space Analysis: Balancing Crew and Mission Design Parameters
TI-19-01426	Transient Combustion Modeling for Hypergolic Engines

Transonic Shock Reflections in SLS Wind Tunnel Testing
Treatment of Pressure Transients in Space Flight Pressurized Systems
Tube Test Coupon for COPV Mechanics
ULA Hydrazine Tank Proof Failure Investigation Support
Ultra Long Duration Balloon (ULDB) Review Support
Unconservatism of LEFM Analysis Post Autofrettage
Unique Science from the Moon in the Artemis Era
Update Human Systems Integration Practitioner's Guide
Updates and Modernization of the CEA Code
Updating RefProp with Nitrogen Tetroxide Properties
US Army: Reentry Aeroballistics Trajectory and Thermal Protection
US EVA 80 Water in Helmet Investigation
USAF F-22 On Board Oxygen Generating System
Use of Commercial EEE Parts in NASA
Use of Hydrazine for Orion Landing Roll Control
USN Multi-Stage Supersonic Target (MSST)
VAB Pile Cap Peer Review
VAB Solid Rocket Motor Quantity-Distance Proposal
VAB Survivability Technical Support
Validation of ISS Lithium Ion Main Battery's Thermal Runaway Mitigation Analysis and Design Features
Verification of Probabilistic Requirements for CxP
Verification of Testing Standard for CO2 Partial Pressure in EVA Suits
VIPR Experiment Impacts on the C-17 Engine-Pylon Interface
Virgin Orbit Oxygen Compatibility Assessment
Viscous Effects on Launch Vehicle Ground Wind-Induced Oscillations
Visual Impact Systems (VIS)
Wallops Acoustic Suppression Ring Weld NDE Support
Waterflow Pulse Test Support to develop RL-10 pogo model propulsion terms
Wave Model Developed to Analyze Orion Water Landing Conditions
WFF Balloon Program Office Support
WFF Super Pressure Balloon Data Acquisition Design Support
Wind Tunnel Testing of Subscale Ringsail and Disk-Gap-Band Parachutes
Wire and Wire Bundle Ampacity Testing and Analysis
Wire Discoloration Tiger Team
Wireless Connections in Spacecraft
Wireless Passive RF SAW Sensor-Tag
WMAP Battery Operations Problem Resolution Team
X-51 Anomaly Investigation