Link	Topic #	Title	Objective	Business Area	LM POC	Email Address	Phone
View Online	A17-135	360 degree field of view information in a 120 degree immersive virtual reality (VR) display	To support Warfighter (soldier, airman, commander, etc.) situational awareness and decisive actions through the development of presentation techniques capable of providing 360 degree field of view with enhanced symbology in a 120 degree field of view immersive virtual reality display.	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Training and Logistics Solutions (RMS TLS)	Gretchen Head Jesus Isarraras John Fontana Joshua Kitain	gretchen.head@lmco.com jesus.isarraras@lmco.com john.c.fontana@lmco.com joshua.d.kitain@lmco.com	000-000-0000 000-000-0000 407-356-3968 4073061039
View Online	A17-135	360 degree field of view information in a 120 degree immersive virtual reality (VR) display	To support Warfighter (soldier, airman, commander, etc.) situational awareness and decisive actions through the development of presentation techniques capable of providing 360 degree field of view with enhanced symbology in a 120 degree field of view immersive virtual reality display.	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Rotary and Mission Systems, Training and Logistics Solutions (RMS TLS) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	Gretchen Head Joshua Kitain Margaret Bien	gretchen.head@lmco.com joshua.d.kitain@lmco.com margaret.e.bien@lmco.com	000-000-0000 4073061039 xxx-xxx-xxxx
View Online	A17-136	Improved Coupling Efficiency Optical Pump Combiners for Fiber Laser Systems	Design and develop novel materials, processes and/or geometries of optical pump combiner to increase coupling efficiency.	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems	Gretchen Head Jesus Isarraras	gretchen.head@lmco.com jesus.isarraras@lmco.com	000-000-0000 000-000-0000
View Online	A17-137	Robotics and Armaments controller	Design and develop a handheld robotics and armament controller that can receive information from combined group of manned and unmanned platforms treated as a single operator control unit	LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	John Fontana Jeffrey Smithson	john.c.fontana@lmco.com jeffrey.s.smithson@lmco.com	407-356-3968
View Online	A17-138	Advanced Materials for Gamma Spectrometry	Develop innovative approaches to, and demonstrate the production of, an alternative gamma spectrometry material that simultaneously improves technical performance and lowers procurement costs.	-	-	-	-
View Online	A17-139	Unmanned Systems Teaming for Semi-Autonomous Casualty Extraction	Develop a capability to enable emerging mobile robotic platforms to function as a team to locate, assess, and extract a casualty back to a safe location for medical treatment and further evacuation from difficult terrain and hazardous environments.	LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	John Fontana Jeffrey Smithson	john.c.fontana@lmco.com jeffrey.s.smithson@lmco.com	407-356-3968
View Online	A17-140	Improved biomonitoring of toxicant exposures and health in the deployed environment using preserved blood.	Develop improved fieldable capabilities for the collection and preservation of blood samples for biomonitoring occupational and/or environmental exposures.	-	-	-	-
View Online	A17-141	Gunner Primary Sight (GPS) Shock Isolator	Develop a material and structural solution designed to be integrated onto the M1A2 Abrams tank and isolate the Abrams Gunner Primary Sight (GPS) system from the turret. The isolator shall reduce MIL-STD-810G ballistic shock inputs in all 3 axes, to levels which allow various optical vision systems to continue	LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	John Fontana Jeffrey Smithson	john.c.fontana@lmco.com jeffrey.s.smithson@lmco.com	407-356-3968
View Online	A17-142	Optical Character Recognition (OCR) Automated Document Pre-processing Software	Develop Optical Character Recognition (OCR) automated document pre-processing software that can be integrated into the US Army Machine Foreign Language Translation System (MFLTS) Software Architecture. Pre-processing software should provide automated document cleaning and correction for seamless OCR processing and machine translation (MT)	LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Training and Logistics Solutions (RMS TLS)	John Fontana Joshua Kitain	john.c.fontana@lmco.com joshua.d.kitain@lmco.com	407-356-3968 4073061039
View Online	A17-143	Near Real-time LIDAR Proc	Design and develop the algorithms needed to perform onboard Automated Feature Extraction (AFE) and/or aided target recognition (AiTR) on Light Detection and Ranging (LIDAR) data.	LM Space Systems LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS) LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	Jesus Isarraras John Fontana Margaret Bien Adam Blanchard	jesus.isarraras@lmco.com john.c.fontana@lmco.com margaret.e.bien@lmco.com Adam.Blanchard@lmco.com	000-000-0000 407-356-3968 xxx-xxx-xxxx
View Online	A17-144	Next Generation Encrypted Wireless Intercom Waveform	Propose and develop next generation hardware and waveform for the Encrypted Aircraft Wireless Intercom System (EAWIS) capable of supporting both voice and data while meeting a new mission time requirement of eleven hours.	LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	John Fontana Jeffrey Smithson	john.c.fontana@lmco.com jeffrey.s.smithson@lmco.com	407-356-3968
View Online	A17-145	Advanced Human Type Target	Develop a Human Type Target (HTT) that increases realism (realistic portrayal of threat, threat escalation, and threat reduction), durability, and usability in the Urban Operations (UO) and Live Fire Training environment. An HTT is a stationary, physical, three dimensional, full body target designed to realistically portray a human being in the training domain.	LM Rotary and Mission Systems, Training and Logistics Solutions (RMS TLS)	Joshua Kitain	joshua.d.kitain@lmco.com	4073061039
View Online	A17-146	In Vehicle Adjustable Torsion Bar Technologies	Develop a novel new combat vehicle torsion bar system that can vary vehicle pitch, attitude, provide ride height management and wheel lockout capability for ground combat vehicles. This will allow combat vehicles to improve and/or regain lost mobility, provide additional tractive effort, increase ride quality and augment towing and recovery.	LM Missiles and Fire Control (MFC)	John Fontana	john.c.fontana@lmco.com	407-356-3968
View Online	AF173-001	Occupancy assessment and control of smart buildings and resilient infrastructure	An autonomous system to assess inputs from sensors and allocate energy to functions in a facility to optimize usage for assets present, and to sense, report and respond to an event, track personnel, and sustain personnel and sensitive equipment.	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Missiles and Fire Control (MFC)	Gretchen Head John Fontana	gretchen.head@lmco.com john.c.fontana@lmco.com	000-000-0000 407-356-3968

View Online	AF173-002	Endpoint Protection for Zero Day Prevention	Endpoint/host protection based on automated, signature-less (i.e. artificial intelligence based), malware detection algorithms run locally on hosts.	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	Gretchen Head John Fontana Margaret Bien	gretchen.head@lmco.com john.c.fontana@lmco.com margaret.e.bien@lmco.com	000-000-0000 407-356-3968 xxx-xxx-xxxx
View Online	AF173-003	Smart Modules/Antennas to Enable Multiple Simultaneous TCDLs	Develop cost-effective smart modules and/or smart antennas that can be bolt-on or added to TCDL transceivers on multiple platforms to enable simultaneous TCDL links at the same band.	LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	John Fontana Margaret Bien	john.c.fontana@lmco.com margaret.e.bien@lmco.com	407-356-3968 xxx-xxx-xxxx
View Online	AF173-004	Turbine Exhaust Gas Temperature Sensing using Fiber Optics Technologies	Develop non-intrusive technologies for gas turbine exhaust temperature measurement that will enable future high performance engines.	LM Missiles and Fire Control (MFC)	John Fontana	john.c.fontana@lmco.com	407-356-3968
View Online	AF173-005	Lithium Metal or Lithium-ion (Li-ion) Battery using Nonflammable, Room-Temperature Ionic Liquid or Solid Electrolyte(s)	Develop an ionic liquid or solid based electrolyte for lithium metal or lithium-ion batteries that is nonflammable, has a high ionic conductivity over a wide temperature range, and is electrochemically stable to ensure long battery lifetimes.	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	Gretchen Head Jesus Isarraras John Fontana Adam Blanchard	gretchen.head@lmco.com jesus.isarraras@lmco.com john.c.fontana@lmco.com Adam.Blanchard@lmco.com	000-000-0000 000-000-0000 407-356-3968
View Online	AF173-006	Ultra-Compact Heat Exchangers	Demonstrate a 30kW refrigerant-air condenser design with 50 percent improvement in volumetric heat transfer capacity and no more than 10 percent increase in pressure drop per kW of heat exchanged compared to state-of-the- art compact condensers.	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Missiles and Fire Control (MFC)	Gretchen Head John Fontana	gretchen.head@lmco.com john.c.fontana@lmco.com	000-000-0000 407-356-3968
View Online	AF173-007	Automated Parametric Discretization Tool for High-Fidelity Hypersonic Design Analysis	Take recent mathematical advances in use by the movie animation industry for creating subdivision surfaces and extend to three dimensions for use in CFD and CSM solvers to enable high-fidelity hypersonic vehicle design.	LM Space Systems LM Missiles and Fire Control (MFC)	Jesus Isarraras John Fontana	jesus.isarraras@lmco.com john.c.fontana@lmco.com	000-000-0000 407-356-3968
View Online	AF173-008	Enhanced SiC Matrix for Launch Vehicle Carbon / Carbon Composites	Develop affordable, high-temperature Carbon / Carbon composite materials that will reduce the manufacturing cost of critical launch vehicle components.	LM Space Systems LM Missiles and Fire Control (MFC)	Jesus Isarraras John Fontana	jesus.isarraras@lmco.com john.c.fontana@lmco.com	000-000-0000 407-356-3968
View Online	AF173-009	Identifying and Predicting Influential Factors Across the Materiel and Non-Materiel Solution Spectrum for Complex, Multi-Domain USAF Challenges	Develop an analytical capability to overcome challenges inherent in predicting potential influencing factors, performance, and mission effectiveness within complex, multi-domain challenges that the future USAF will face.	LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	John Fontana Margaret Bien	john.c.fontana@lmco.com margaret.e.bien@lmco.com	407-356-3968 xxx-xxx-xxxx
View Online	AF173-010	Lifecycle Cost Modeling Tools for Elements of a Digital Engineering Ecosystem	Develop methodologies for modeling the lifecycle cost of different Digital Engineering ecosystem configuration options, including IT/network infrastructure, software tools, data warehousing, data management, user interfaces, and associated CONOPS.	LM Space Systems LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	Jesus Isarraras John Fontana Margaret Bien	jesus.isarraras@lmco.com john.c.fontana@lmco.com margaret.e.bien@lmco.com	000-000-0000 407-356-3968 xxx-xxx-xxxx
View Online	AF173-011	COLLECTIVE/COOPERATIVE NAVIGATION	To develop multi-source navigation algorithms to ensure weapons grade navigation capability for weapons systems in Anti-Access/Area Denial (A2AD) environments. This will address the need for Global Positioning System (GPS)-denied, A2AD over-land and/or over-water cooperative navigation capability applicable to low cost munitions.	LM Aeronautics (Aero) LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	Craig Owens Gretchen Head Jesus Isarraras John Fontana Margaret Bien	craig.l.owens@lmco.com gretchen.head@lmco.com jesus.isarraras@lmco.com john.c.fontana@lmco.com margaret.e.bien@lmco.com	817/777-6504 000-000-0000 000-000-0000 407-356-3968 xxx-xxx-xxxx
View Online	AF173-012	Dual-mode Energetics	Develop energetic formulations that can function as a propellant and an explosive yet satisfy insensitive munition requirements.	LM Space Systems LM Missiles and Fire Control (MFC)	Jesus Isarraras John Fontana	jesus.isarraras@lmco.com john.c.fontana@lmco.com	000-000-0000 407-356-3968
View Online	AF173-013	BIO-INSPIRED OPTICAL SOURCE EXCLUSION (BIOSE)	To improve sensor survivability and operations by developing blocking technologies that protect detectors from damaging/blinding spikes in signal intensity.	LM Aeronautics (Aero) LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems	Craig Owens Gretchen Head Jesus Isarraras	craig.l.owens@lmco.com gretchen.head@lmco.com jesus.isarraras@lmco.com	817/777-6504 000-000-0000 000-000-0000

View Online	AF173-014	Metallic Glass	Develop materials with greater strength and resilience for spacecraft structures and mechanisms.	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems LM Missiles and Fire Control (MFC)	Gretchen Head Jesus Isarraras John Fontana	gretchen.head@lmco.com jesus.isarraras@lmco.com john.c.fontana@lmco.com	000-000-0000 000-000-0000 407-356-3968
View Online	AF173-015	Model Based Systems Engineering Big Data Analytics	Develop and demonstrate ability to discover, aggregate and analyze disparate data types and formats to enhance the decision making process during weapon system design and development.	LM Aeronautics (Aero) LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Training and Logistics Solutions (RMS TLS) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	Craig Owens Gretchen Head Jesus Isarraras John Fontana Joshua Kitain Margaret Bien	craig.l.owens@lmco.com gretchen.head@lmco.com jesus.isarraras@lmco.com john.c.fontana@lmco.com joshua.d.kitain@lmco.com margaret.e.bien@lmco.com	817/777-6504 000-000-0000 000-000-0000 407-356-3968 4073061039 xxx-xxx-xxxx
View Online	AF173-016	Space Debris Engagement and De-Orbiting Device	Develop a self-contained device that can be deployed from a host satellite in proximity to an orbiting defunct rocket body, attach to or capture the rocket body, and cause sufficient increase in drag, using no power after deployment, to remove the rocket body from orbit.	LM Space Systems LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	Jesus Isarraras Jeffrey Smithson	jesus.isarraras@lmco.com jeffrey.s.smithson@lmco.com	000-000-0000
View Online	AF173-017	Air Force Declassification Office Knowledge Capture and Process Optimization	The Air Force Declassification Office (AFDO) seeks to document and analyze business processes for classified document review and define industry best practices and new technologies to increase efficiencies and promote cost savings. This project would assist AFDO in order to adhere to the presidential mandate Executive Order 13526, "Classified National Security Information," Promotion of New Technologies to Support Declassification that was issued on 29 December 2009. It outlines how classified	LM Missiles and Fire Control (MFC)	John Fontana	john.c.fontana@lmco.com	407-356-3968
View Online	AF17-CT01	Sun-Tracking Millimeter Wave Radiometer	Design and implement a sun-tracking radiometer system to measure millimeter wave attenuation with high dynamic range and temporal resolution. Threshold values are 30 dB dynamic range and 5 second resolution.	LM Missiles and Fire Control (MFC)	John Fontana	john.c.fontana@lmco.com	407-356-3968
View Online	AF17-CT02	Rapid Discovery of Evasive Satellite Behaviors	Develop robust, near real-time algorithms that rapidly discover the behavioral patterns and operational intent of potentially evasive and/or ambiguous active resident space objects (RSOs) for the purposes of space situational awareness (SSA) across the entire SSA space catalog.	LM Space Systems LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	Jesus Isarraras Margaret Bien	jesus.isarraras@lmco.com margaret.e.bien@lmco.com	
View Online	AF17-CT03	Operational Outer Zone Energetic Charged Particle Model	Develop a model of the outer zone of Earth's radiation belt that is suitable for operational specification of electron flux levels.	LM Space Systems	Jesus Isarraras	jesus.isarraras@lmco.com	000-000-0000
View Online	AF17-CT04	Design of III-V Antimonide InAs/InAsSb Strained-Layer Superlattice Materials for Improved LWIR Performance	Develop minority carrier transport model software based on innovative electronic structure and transport models leading to superior nBn InAs/InAsSb antimonide-based strained-layer superlattice materials.	LM Aeronautics (Aero) LM Space Systems LM Missiles and Fire Control (MFC)	Craig Owens Jesus Isarraras John Fontana	craig.l.owens@lmco.com jesus.isarraras@lmco.com john.c.fontana@lmco.com	817/777-6504 000-000-0000 407-356-3968
View Online	AF17-CT05	Verification and Validation of Algorithms for Resilient Complex Software Controlled Systems	This STTR topic will investigate approaches to verification and validation (V&V) of algorithms for GN&C of spacecraft without on-orbit testing.	LM Space Systems LM Missiles and Fire Control (MFC)	Jesus Isarraras John Fontana	jesus.isarraras@lmco.com john.c.fontana@lmco.com	000-000-0000 407-356-3968
View Online	DHA173-001	Synthetic Task Environment for Patient Preparation and Care in an A2/AD Operations	The topic is focused on the development and demonstration of a synthetic task environment for en route care patient preparation and care in Contested Degraded Operations (CDO) environments. This includes the capacity for creating/editing scenarios, recording performance and simulation data, and interoperating with external simulations.	LM Rotary and Mission Systems, Training and Logistics Solutions (RMS TLS)	Joshua Kitain	joshua.d.kitain@lmco.com	4073061039
View Online	DHA173-002	Joint Dislocation and Reduction Simulator for Training	Develop and demonstrate a simulation-based system to provide psychomotor skills training for medical practitioners for the task of identifying and treating shoulder, elbow, and finger joint dislocations.	-	-	-	-
View Online	DHA173-003	Automated, handheld device to rapidly access arteries and veins in trauma patients	On the battlefield, combat clinicians provide emergency medical care under the most challenging conditions. Remote locations, poor lighting, fire and explosions, poor road conditions, and the presence of mass casualties can lead to excessive delays in obtaining vascular access. Ultrasound guidance is the recommended technique for central venous cannulation (CVC); however, reports do exist of complications during insertion of the	LM Missiles and Fire Control (MFC)	John Fontana	john.c.fontana@lmco.com	407-356-3968

View Online	DHA17C-001	Human Experimentation Toolkit for Variable Physiological/Environmental Conditions in an Aerospace Environment	Research-based approach to bridge cognitive, physiological, and behavioral metrics for use in a human experimentation toolkit for collecting associated data while participants are exposed to a wide array of physiological and environmental conditions – with focus on hypoxia in the aerospace environment.	LM Missiles and Fire Control (MFC)	John Fontana	john.c.fontana@lmco.com	407-356-3968
View Online	DHA17C-002	UnderwaterExplosion Sensor Data Collection	The objective of this STTR is to develop a method to make environmental data from underwater explosions (UNDEX) available to medical professionals to help with injury treatment. To meet this objective, a conductive fiber (e-textile) suitable for	LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	John Fontana Adam Blanchard	john.c.fontana@lmco.com Adam.Blanchard@lmco.com	407-356-3968
View Online	DLA173-001	Analysis, Identification, and Eradication of Mold Development in the Subsistence (Rations) Supply Chain	Identify the root cause of mold development in the Rations Supply chain and analyze the results to develop a business case for eradication of the mold concerns.	LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	Jeffrey Smithson	jeffrey.s.smithson@lmco.com	-
View Online	DLA173-002	Reverse Engineering Technical Data Packages for P/N: BL5D-7.9A, NSN 6130-01-132-6975 (POWER SUPPLY)	Improve product availability and increase competition through the performance of Reverse Engineering in the development of a technical data package to be submitted as a Source Approval Request (SAR). The normal expected result of reverse engineering	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	Gretchen Head John Fontana Adam Blanchard	gretchen.head@lmco.com john.c.fontana@lmco.com Adam.Blanchard@lmco.com	000-000-0000 407-356-3968
View Online	MDA17-T001	Innovative Methodologies for Manufacturing of Lethality Test Articles	Leverage advancements in rapid prototyping technologies such as 3-D printing to develop innovative, cost effective, short lead time manufacturing method(s) for small production run, complex test articles of aerospace quality structural metal alloys without affecting the material properties of the subject materials.	LM Space Systems LM Missiles and Fire Control (MFC)	Jesus Isarraras John Fontana	jesus.isarraras@lmco.com john.c.fontana@lmco.com	000-000-0000 407-356-3968
View Online	MDA17-T002	Advanced Rocket Trajectory Propagation Techniques	Develop new techniques for trajectory propagation that are more suited for use in federated simulations than traditional methods	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	Gretchen Head Jesus Isarraras John Fontana Margaret Bien	gretchen.head@lmco.com jesus.isarraras@lmco.com john.c.fontana@lmco.com margaret.e.bien@lmco.com	
View Online	MDA17-T003	High-Efficiency, Low-Volume, Space-Qualified Cryogenic-Coolers	Seeking innovative high-efficiency, low-volume, space-qualified cryo-coolers.	LM Space Systems LM Missiles and Fire Control (MFC)	Jesus Isarraras John Fontana	jesus.isarraras@lmco.com john.c.fontana@lmco.com	000-000-0000
View Online	MDA17-T004	Lightweight Structural Components of a Missile Body	Develop materials solutions to lighten the weight of various structural components of a missile body.	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems LM Missiles and Fire Control (MFC)	Gretchen Head Jesus Isarraras John Fontana	gretchen.head@lmco.com jesus.isarraras@lmco.com john.c.fontana@lmco.com	000-000-0000 000-000-0000 407-356-3968
View Online	N173-142	Advanced Tactical Vehicle Braking	Identify advanced braking concept(s) for heavy tactical vehicles (and trailers) that would meet or exceed current performance specifications relating to mobility, fuel economy, and safety, but with a smaller physical footprint (size/weight), and revolutionary advantages in maintenance and logistics support that will have a dramatic effect across the Marine Air-Ground Task Force (MAGTF).	LM Missiles and Fire Control (MFC)	John Fontana	john.c.fontana@lmco.com	407-356-3968
View Online	N173-143	Transponded Satellite Communications Ad-hoc Networking (T-SCAN)	Develop a prototype Transponded Satellite Communications Ad-hoc Networking (T-SCAN) algorithm for non-networking capable Wideband Anti-jam Modern Systems (WAMS) waveforms to be hosted on WAMS to form and manage multiple simultaneous point-to-multipoint sessions over a transponded satellite.	LM Space Systems LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	Jesus Isarraras John Fontana Margaret Bien	jesus.isarraras@lmco.com john.c.fontana@lmco.com margaret.e.bien@lmco.com	000-000-0000 407-356-3968 xxx-xxx-xxxx
View Online	N173-144	Cybersecurity Insider Threat Validity and Risk Analysis	Develop the Navy Cybersecurity insider threat analysis tool that combines various security and network information with User Activity Monitoring (UAM) information, Continuous Evaluation (CE) Information, and other data sources to create an objective behavioral profile to determine likelihood of cyber comprise due to inappropriate activities on the network, violation of security, and/or unusual network activities in support of CE of users	LM Aeronautics (Aero) LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	Craig Owens Gretchen Head Jesus Isarraras John Fontana Margaret Bien	craig.l.owens@lmco.com gretchen.head@lmco.com jesus.isarraras@lmco.com john.c.fontana@lmco.com margaret.e.bien@lmco.com	817/777-6504 000-000-0000 000-000-0000 407-356-3968 xxx-xxx-xxxx
View Online	N173-145	Rapid Autonomous Data Ingest Algorithms (RADIA)	The Distributed Common Ground Station-Navy Increment 2 (DCGS-N Inc 2) program seeks to employ novel machine learning techniques to optimize data ingest of multiple heterogeneous data types into anticipated Navy program data repositories (e.g., Accumulo). Automated data ingest must aid the DCGS-N Inc 2	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	Gretchen Head Jesus Isarraras Margaret Bien	gretchen.head@lmco.com jesus.isarraras@lmco.com margaret.e.bien@lmco.com	000-000-0000 000-000-0000 xxx-xxx-xxxx
View Online	N173-146	Frequency-Equalized Electro-Optic (EO) Phase Modulators for High-Precision Interferometric Inertial Sensors	Develop Electro-Optic (EO) phase modulators with flat frequency response, low switching voltage-length product, and multi-decade environmental lifetime for use in strategic-grade high-precision inertial sensors such as interferometric fiber-optic gyroscopes and accelerometers.	LM Aeronautics (Aero) LM Space Systems LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	Craig Owens Jesus Isarraras John Fontana Adam Blanchard	craig.l.owens@lmco.com jesus.isarraras@lmco.com john.c.fontana@lmco.com Adam.Blanchard@lmco.com	817/777-6504 000-000-0000 407-356-3968
View Online	OSD173-J01	Active Noise Control for Small Caliber Ammunition	Reduce or change the sound signature, in terms of magnitude, frequency, and/or duration, of a small caliber projectile as it travels downrange through the use of Active Noise Reduction, Active Noise Control, or similar methods. Overall control of weapon signature at the muzzle is a secondary objective.	LM Missiles and Fire Control (MFC)	John Fontana	john.c.fontana@lmco.com	407-356-3968

View Online	OSD173-J02	Automatic Target Classifier for Small Caliber Weapon Systems	Develop and demonstrate an automatic target classifier for integration into small caliber/close-combat weapon systems that are organic to an infantry squad. The goal is to detect, classify, recognize, and identify all potential targets within the engagemen range of small caliber weapon systems in a variety of environmental conditions.	LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	John Fontana Margaret Bien	john.c.fontana@lmco.com margaret.e.bien@lmco.com	407-356-3968 xxx-xxx-xxxx
View Online	OSD173-J03	Diagnostic Techniques for Caseless Ammunition Development	Develop test techniques, methodologies and fixture(s) for design, development and demonstration of caseless small caliber ammunition technology.	-	-	-	-
View Online	OSD173-J04	Propellant Material Additives for Electrical Ignition Application	To develop propellant material additives for electric ignition applications.	LM Missiles and Fire Control (MFC)	John Fontana	john.c.fontana@lmco.com	407-356-3968
View Online	SB173-001	Wearable Ultrasound for Imaging and Modulation	Design and fabricate a wearable and conformable ultrasound transducer system for high resolution imaging of tissues/organs as well as delivering acoustic energy for modulating the function of those organs or tissues.	LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Training and Logistics Solutions (RMS TLS)	John Fontana Joshua Kitain	john.c.fontana@lmco.com joshua.d.kitain@lmco.com	407-356-3968 4073061039
View Online	SB173-002	Nonlinear Plasmonic Structures and Devices	Develop functional photonic devices and circuits which exploit non-linear morphological and nanostructure compositions that are complementary metal–oxide–semiconductor (CMOS) compatible.	LM Space Systems LM Missiles and Fire Control (MFC)	Jesus Isarraras John Fontana	jesus.isarraras@lmco.com john.c.fontana@lmco.com	000-000-0000 407-356-3968
View Online	SB173-003	Mitigating Data-Oriented Application Exploits via Application Data Sandboxing	Design and implement a framework for application data sandboxing of data-rich applications such as web browsers, document editors and web servers hosting dynamic content.	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	Gretchen Head Jesus Isarraras John Fontana Margaret Bien	gretchen.head@lmco.com jesus.isarraras@lmco.com john.c.fontana@lmco.com margaret.e.bien@lmco.com	000-000-0000 000-000-0000 407-356-3968 xxx-xxx-xxxx
View Online	SB173-004	Design Tools for Hardware Trojan Detection and Mitigation	Define new hardware security techniques for integrated circuits (ICs) and develop electronic design automation (EDA) tools enabling the detection and neutralization of malicious logic modifications.	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems LM Missiles and Fire Control (MFC)	Gretchen Head Jesus Isarraras John Fontana	gretchen.head@lmco.com jesus.isarraras@lmco.com john.c.fontana@lmco.com	000-000-0000 000-000-0000 407-356-3968
View Online	SB173-005	Design of and Rapid Manufacturing Technology for a Flying Missile Rail	Design a low-risk flying missile rail to launch an AIM-120 missile and associated manufacturing approach that could surge to large volumes on short notice.	LM Missiles and Fire Control (MFC)	John Fontana	john.c.fontana@lmco.com	407-356-3968
View Online	SB173-006	Rapid Response Small Launcher Technology	Leverage emerging commercial technology and investments to deliver an operationally responsive, low-cost expendable launch vehicle (ELV) with individual stages that could be re-purposed as an expendable upper stage on a reusable first-stage booster. Develop the vehicle design and manufacture and test the ELV stack and/or the candidate expendable upper stage.	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	Gretchen Head Jesus Isarraras John Fontana Adam Blanchard	gretchen.head@lmco.com jesus.isarraras@lmco.com john.c.fontana@lmco.com Adam.Blanchard@lmco.com	000-000-0000 000-000-0000 407-356-3968
View Online	SOCOM173-001	Daytime Marker	The objective of this topic is to develop an innovative means of marking targets during the day. The reason to mark targets in the day is to direct fire from both ground and air assets.	LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Training and Logistics Solutions (RMS TLS)	John Fontana Joshua Kitain	john.c.fontana@lmco.com joshua.d.kitain@lmco.com	407-356-3968 4073061039
View Online	SOCOM173-002	3D Modeling Indoor Space	The objective of this topic is to develop an innovative and computationally efficient method for processing high resolution, still-frame images and/or Full Motion Video (FMV) from handheld devices into a photo-realistic, textured, high resolution, 3D model of a building's interior. The automated workflow should take input from the imagery/video files, generate a 3D scene model, and save it in an open standard data format capable of being	LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Training and Logistics Solutions (RMS TLS) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS)	John Fontana Joshua Kitain Margaret Bien	john.c.fontana@lmco.com joshua.d.kitain@lmco.com margaret.e.bien@lmco.com	407-356-3968 4073061039 xxx-xxx-xxxx
View Online	SOCOM173-003	On-the-Fly 3D Modeling	The objective of this topic is to develop an innovative method for real-time or near-real-time processing of high resolution, Red-Green-Blue (RGB), still-frame images and/or streamed Full Motion Video (FMV) being received from an in-flight tactical Group 1 Unmanned Aerial System (UAS). The automated workflow should take input from the imagery/video stream, generate a 3D scene model, annotate and integrate the model with platform telemetry or data from other airborne sensors (tagging, tracking and locating (TTL); signals intelligence (SIGINT); electronic warfare (EW), etc.) for presentation to the sensor and/or UAS operator	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Space Systems LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Training and Logistics Solutions (RMS TLS) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS) LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	Gretchen Head Jesus Isarraras John Fontana Joshua Kitain Margaret Bien Adam Blanchard	gretchen.head@lmco.com jesus.isarraras@lmco.com john.c.fontana@lmco.com joshua.d.kitain@lmco.com margaret.e.bien@lmco.com Adam.Blanchard@lmco.com	000-000-0000 000-000-0000 407-356-3968 4073061039 xxx-xxx-xxxx
View Online	SOCOM173-004	Handheld Hidden Chamber Detection	The objective of this topic is to develop and demonstrate innovative technologies to quickly detect, locate, and discriminate hidden chambers within an average-sized room (168 square feet) which may contain suspicious contents with a handheld, easy to	LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	John Fontana Jeffrey Smithson	john.c.fontana@lmco.com jeffrey.s.smithson@lmco.com	407-356-3968

View Online	SOCOM173-005	Counter UAS Weapon	The objective of this topic is to develop an innovative system or weapon prototype that will acknowledge, detect, identify, locate, track, and disable or destroy an enemy or non-friendly Group 1 or 2 Small Unmanned Aerial System (SUAS).	LM Rotary and Mission Systems, Cyber, Ships and Advanced Technologies (RMS CSAT), Unspecified LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Integrated Warfare Systems & Sensors (RMS IWSS) LM Rotary and Mission Systems, C4 & Undersea Systems (RMS C4USS)	Gretchen Head John Fontana Margaret Bien Adam Blanchard	gretchen.head@lmco.com john.c.fontana@lmco.com margaret.e.bien@lmco.com Adam.Blanchard@lmco.com	000-000-0000 407-356-3968 xxx-xxx-xxxx
View Online	SOCOM17C-001	Human Performance Optimization	The objective of this topic is to develop innovative technologies that enhance physiological, physical, psychological, and intellectual performance, and improve resistance to disease, stress, or injury caused by the demands of sustained operations in extreme environments.	LM Missiles and Fire Control (MFC) LM Rotary and Mission Systems, Training and Logistics Solutions (RMS TLS)	John Fontana Joshua Kitain	john.c.fontana@lmco.com joshua.d.kitain@lmco.com	407-356-3968 4073061039
View Online	ST17C-001	Computational Biology Platform Technology for Cell Conversion and Differentiation	Design, develop, and demonstrate a computational biology platform that exploits modern high-resolution assays, high-throughput sequencing data, and -omics databases to analyze, model, control, and optimize cell conversion from one type to another.	LM Missiles and Fire Control (MFC)	John Fontana	john.c.fontana@lmco.com	407-356-3968
View Online	ST17C-002	Processes for Fabrication of Atomically Precise Strongly Correlated Materials	Establish approaches to fabricate with atomic-level precision strongly correlated electronic materials such as artificially created two-dimensional materials with Hubbard interactions and high temperature superconducting oxides.	LM Missiles and Fire Control (MFC)	John Fontana	john.c.fontana@lmco.com	407-356-3968
View Online	ST17C-003	Assess Stability and Anti-Fragility of Dense Urban Terrains	Develop a computational framework for assessing the robustness and resilience of Dense Urban Terrains (DUTs) to volatility and stress.	LM Missiles and Fire Control (MFC)	John Fontana	john.c.fontana@lmco.com	407-356-3968