Proposals Selected for Negotiation of Contracts

- **Alabama A&M University**
  4900 Meridian Street North
  Huntsville, AL 35811

  **Streamline Automation, LLC**
  3100 Fresh Way Southwest
  Huntsville, AL 35805
  Alton Reich (256) 713-1220
  20-1-T6.05-5155 LaRC
  Testing of COTS Systems in Space Radiation Environments [1]

- **Arizona State University**
  699 South Mill Avenue
  Tempe, AZ 85281

  **Alphacore, Inc.**
  304 South Rockford Drive
  Tempe, AZ 85281
  Andrew Levy (503) 320-5466
  20-1-T8.04-5368 GSFC
  Metamaterials [2]

- **Arizona State University**
  699 South Mill Avenue
  Tempe, AZ 85281

  **Cactus Materials**
  7700 South River Parkway
Chandler, AZ 85284
Mohammed Rafiqul Islam (480) 213-4704
20-1-T6.06-5608 JSC

[Long Term Uses of Potable Water Containing Silver Disinfectant in High Surface to Volume Ratio Metallic Surfaces] [3]

- Auburn University
  23 Samford Hall
  Auburn, AL 36849

Research in Flight
1919 North Ashe Court
Auburn, AL 36830
Roy Hartfield (334) 444-8523
20-1-T15.04-4887 AFRC


- Auburn University
  23 Samford Hall
  Auburn, AL 36849

Physical Sciences, Inc.
20 New England Business Center
Andover, MA 1810
B. David Green (978) 689-0003
20-1-T13.01-5309 SSC

[Intelligent Sensor Systems for Rocket Propulsion Testing] [5]

- Board of Trustees of the University of Illinois (at Urbana-Champaign)
  1901 South First Street, Suite A
  Champaign, IL 61820

Physical Sciences, Inc.
20 New England Business Center
Andover, MA 1810

B. David Green (978) 689-0003

20-1-T5.04-5470 GRC


- California State University-Northridge
  18111 Nordhoff Street

  Northridge, CA 91330

  Rocket Studios
  16037 Bassett Street

  Lake Balboa, CA 91406

  Daniel Sinor (310) 990-5079

  20-1-T4.03-6408 JPL

  Hierarchical State Machine Visualization in Multi-Robot System [7]

- Carnegie Mellon University
  5000 Forbes Avenue

  Pittsburgh, PA 15213

  Edge Case Research, Inc.
  3485 Butler Street

  Pittsburgh, PA 15201

  Brendon Ouimette (412) 455-5444

  20-1-T4.01-6224 ARC

  Robust Visual Perception Techniques for Intelligent and Adaptive Space Robotics [8]

- Cornell University
  410 Thurston Avenue

  Ithaca, NY

  Aegis Technology, Inc.
  12630 Westminster Avenue, Suite G

  Santa Ana, CA 92706
timothy lin (714) 554-5511
20-1-T15.03-5735 GRC
Solid-State Lithium-ion Batteries for Electrified Aircraft Propulsion Energy Storage [9]

Curators of the University of Missouri on Behalf of UMSL
One University Boulevard
St. Louis, MO 63121

SPEC Sensors LLC
8430 Central Avenue
Newark, CA 94560
David Peaslee (510) 574-8300
20-1-T4.04-5080 ARC
Autonomous Environmental Monitoring and Management Platform for Remote Habitats [10]

Fraunhofer Center for Experimental Software Engineering
5700 Rivertech Court, Suite 210
Riverdale, MD 20737

Orbit Logic, Inc.
7852 Walker Drive
Greenbelt, MD 20770
Ella Herz (301) 982-6234
20-1-T11.03-6321 MSFC
SCRAMBL (Space Communication Reconstruction and Mapping with Blockchain Ledging) [11]

George Mason University
4400 University Drive
Fairfax, VA 22030

Systems and Proposal Engineering Company (dba SPEC Innovations)
10440 Balls Ford Road, Suite 230
Manassas, DE 20109
Steven Dam (540) 272-0013
20-1-T11.04-5376 LaRC

Analytic Standard Operating Procedure Digital Assistant (ASOPDA) [12]

- **Georgia Tech Research Institute (GTRI)**
  205 14th Street Northwest
  Atlanta, GA 30318

**Soar Technology, Inc.**
3600 Green Court, Suite 600
Ann Arbor, MI 48105
Lindsay Bayles (734) 887-7609
20-1-T11.04-4665 LaRC

Ada Phase I [13]

- **Georgia Tech Research Institute (GTRI)**
  250 14th Street Northwest
  Atlanta, GA 30318

**TDA Research, Inc.**
12345 West 52nd Avenue
Wheat Ridge, CO 80033
John D. Wright (303) 940-2347
20-1-T2.05-5396 GRC

A New Oxygen Recovery Process to Reduce Waste from Propellant Tanks [14]

- **Johns Hopkins University Applied Physics Laboratory LLC**
  11100 Johns Hopkins Road
  Laurel, MD 21044

**TRACLabs, Inc.**
100 North East Loop 410, Suite 520
San Antonio, TX 78216
David Kortenkamp (281) 461-7886
20-1-T4.01-5037 ARC

Integrating ROS 2 with the Core Flight System [15]

- **Kennesaw State University**
  1000 Chastain Road
  Kennesaw, GA 30144

  **CTEN Global Strategies, LLC**
  8415 Southwest 28th Place
  Gainesville, FL 32608
  Cason Chatham (770) 633-9169
  20-1-T11.03-6333 GSFC

  Hedera Hashgraph based Distributed Ledger for Aerospace Applications [16]

- **Massachusetts Institute of Technology**
  77 Massachusetts Avenue
  Cambridge, MA 2139

  **Little Prairie Services**
  14 Dunkin Road
  Edgewood, NM 87015
  Roger Lenard (505) 220-8029
  20-1-T2.04-6118 MSFC

  NTR Fuel Testing in MIT Reactor Facilities [17]

- **Massachusetts Institute of Technology**
  77 Massachusetts Avenue
  Cambridge, MA 2139

  **ADVR, Inc.**
  2310 University Way, Building 1-1
  Bozeman, MT 59715
  Betsy Heckel (406) 522-0388
20-1-T5.04-5429 GRC

High-purity, high-rate, photon pair source for space-based entanglement distribution [18]

- Massachusetts Institute of Technology
  77 Massachusetts Avenue
  Cambridge, MA 2139

  Docugami, Inc.
  3500 South Dupont Highway
  Dover, DE 19901
  Sandy Moritz (425) 968-2380
  20-1-T11.04-6527 LaRC

  Next Generation AI-Based Assisted Document Authoring, Recommendation and Understanding [19]

- Montana State University
  Office of Sponsored Programs, PO Box 172470
  Bozeman, MT 59717

  Stottler Henke Associates, Inc.
  1650 South Amphlett Boulevard, Suite 300
  San Mateo, CA 94402
  Nate Henke (650) 931-2719
  20-1-T4.04-5249 ARC

  Gateway Management through Adaptive, Autonomous, Fault Identification & Diagnosis and
  Reconfiguration/Replanning/Rescheduling Optimization [20]

- New Mexico State University-Dona Ana
  1780 East University Avenue
  Las Cruces, NM 88003

  Formalloy Technologies, Inc.
  2830 Via Orange Way, Suite H
  Spring Valley, CA 91978
  Melanie Lang (619) 377-9101
20-1-T12.06-6599 JPL

Data-Driven Modeling of Directed Energy Deposition (DED) for Defect-Free Builds using Real-Time Monitoring Approaches [21]

• Northwestern University

633 Clark Street
Evanston, IL 60208

QuesTek Innovations, LLC

1820 Ridge Avenue
Evanston, IL 60201
Kevin Creely (847) 425-8226

20-1-T12.06-5463 JPL

Improved Part-Scale Modeling of Additive Manufacturing Processes [22]

• Oregon State University

153 Gilbert Hall
Corvallis, OR 97331

Nanovox, LLC

15985 Northwest Schendel Avenue, Suite 201
Beaverton, OR 97006
Debra Ozuna (503) 260-6869

20-1-T12.05-6182 JSC

Additive-Manufactured Ablative Thermal Protection Systems [23]

• Oregon State University

153 Gilbert Hall
Corvallis, OR 97331

CubCrafters Inc.

1918 South 16th Avenue
Yakma, WA 98903
Pat Horgan (509) 895-9465
20-1-T15.04-5017 AFRC

ELAS, Electric Lift Augmenting Slats [24]

- Regents of the University of Michigan
  3003 South State Street
  Ann Arbor, MI 48109

  Design Analysis & Research Corporation
  910 East 29th
  Lawrence, KS 66046
  Willem Anemaat (785) 832-0434

  20-1-T15.04-5958 AFRC

  Open Source Distributed Electric Propulsion MDAO Tool [25]

- South Dakota School of Mines and Technology
  501 East Saint Joseph Street
  Rapid City, SD 57701

  VRC Metal Systems
  600 North Ellsworth Road
  Box Elder, SD 57719
  Terree Matson McCoy (605) 716-0061

  20-1-T2.04-6822 MSFC

  Additive Manufacturing by High-Pressure Cold Spray [26]

- Southwest Research Institute
  6220 Culebra Road
  San Antonio, TX 78238

  Elder Research, Inc.
  300 West Main Street, Suite 301
  Charlottesville, VA 22903
  William Goodrum (434) 973-7673

  20-1-T12.06-4917 JPL
RAMBO: Rapid Additive Manufacturing Build Outcomes [27]

- Southwest Research Institute
  6220 Culebra Road
  San Antonio, TX 78238

Southwest Sciences, Inc.
1570 Pacheco Street, Suite E-11
Santa Fe, NM 87505
Alan Stanton (505) 984-1322
20-1-T6.07-5408 KSC

Real Time Ethylene Monitor for Plant Growth Management [28]

- Stanford University
  450 Serra Mall
  Palo Alto, CA 94304

Intelligent Automation, Inc.
15400 Calhoun Drive, Suite 190
Rockville, MD 20855
Mark James (301) 294-5221
20-1-T15.04-5315 AFRC

Integrated Vehicle-Propulsion-Control Design for DEP-Enabled Aircraft (IDEA) [29]

- Stanford University
  450 Serra Mall
  Palo Alto, CA 94304

Particle Matters, Inc.
2324 Venndale Avenue
San Jose, CA 95124
Sergey Gimelshein (818) 527-5432
20-1-T2.04-5261 MSFC

- **Texas A&M Engineering Experiment Station**
  7607 Eastmark Drive
  College Station, TX 77840

  **ATSP Innovations**
  60 Hazelwood Drive
  Champaign, IL 61820
  Jacob Meyer (217) 778-4400
  20-1-T12.01-4984 LaRC

  Creep-Resistant Aromatic Polyester Thermosets for Thin-Ply Composites [31]

- **Texas State University**
  601 University Drive
  San Marcos, TX 78666

  **Texas Research Institute Austin, Inc.**
  9063 Bee Caves Road
  Austin, TX 78733
  Megan Lietha (512) 615-4444
  20-1-T12.05-5304 JSC

  Additive Manufacturing (AM) of Thermal Protection Systems (TPSs) Using Preceramic Polymer Resin [32]

- **The University of Southern Mississippi**
  118 College Drive, Box #5157
  Hattiesburg, MS 39406

  **Geocent, LLC**
  111 Veterans Boulevard, Suite 1600
  Metairie, LA 70005
  Jeff Tomeny (504) 831-1900
  20-1-T13.01-5600 SSC

  Intelligent Sensor Systems - 2020 [33]
• **The University of Texas at Dallas**
  800 West Campbell Road
  Richardson, TX 75080

  **Nanohmics, Inc.**
  6201 East Oltorf Street, Suite 400
  Austin, TX 78741
  Mike Mayo (512) 389-9990
  20-1-T8.06-5681 GSFC
  [On-Demand Single-Photon Sources for Correlated Calibration of Single Photon Detectors][34]

• **Union College**
  807 Union Street
  Schenectady, NY 12308

  **Vistex Composites, LLC**
  11 Opus Boulevard, Suite B
  Schenectady, NY 12306
  Jaron Kuppers (508) 340-7873
  20-1-T12.01-6578 LaRC
  [OOA Process for Manufacture of Large Thin Gauge Composites][35]

• **University of California - Santa Barbara**
  Office of Research - 3227 Cheadle Hall
  Santa Barbara, CA 93106

  **Amethyst Research, Inc.**
  123 Case Circle
  Ardmore, OK 73401
  Robert Kuester (580) 657-2575
  20-1-T5.04-6397 GRC
  [Ultra-Efficient Integrated Photonic Quantum Transceiver for High-Speed Quantum Communications][36]
• University of Central Florida
  4000 Central Florida Boulevard
  Orlando, FL 32816

  AnalySwift
  5413 Crus Corvi Road
  West Jordan, UT 84081
  Allan Wood (801) 599-5879
  20-1-T12.01-5412 LaRC

  Modeling Nonlinear Viscoelasticity and Time-Dependent Yielding of Thin-Ply Composites [37]

• University of Colorado Boulder
  1111 Engineering Drive
  Boulder, CO 80309

  Orbit Logic, Inc.
  7852 Walker Drive
  Greenbelt, MD 20770
  Ella Herz (301) 982-6234
  20-1-T4.03-5760 JPL

  IN-PASS: Intelligent Navigation, Planning, and Autonomy for Swarm Systems [38]

• University of Colorado Boulder
  1111 Engineering Drive
  Boulder, CO 80309

  Stottler Henke Associates, Inc.
  1650 South Amphlett Boulevard, Suite 300
  San Mateo, CA 94402
  Nate Henke (650) 931-2719
  20-1-T4.04-5250 KSC

  Autonomous Payload Operations on the Lunar Gateway [39]
• University of Connecticut
  438 Whitney Road Extension, U-1133
  Storrs, CT 6269

  **Combustion Research and Flow Technology**
  6210 Keller's Church Road
  Pipersville, PA 18947
  Neeraj Sinha (215) 766-1520
  20-1-T2.05-4812 GRC

  [Design of Spray Cooling Systems for Childown of Propellant Tanks](#) [40]

• University of Connecticut
  438 Whitney Road Extension, U-1133
  Storrs, CT 6269

  **Precision Combustion, Inc.**
  410 Sackett Point Road
  North Haven, CT 6473
  Anthony Anderson (203) 287-3700
  20-1-T2.05-5203 GRC

  [Pressure and Low Temperature Tolerant, High Current Density Solid Electrolyte for Propellant Grade Reactants](#) [41]

• University of Dayton
  300 College Park
  Dayton, OH 45469

  **Applied Optimization, Inc.**
  3040 Presidential Drive, Suite 100
  Fairborn, OH 45324
  Barbara Krivian (937) 431-5100
  20-1-T8.04-6260 JPL

  [Tunable, Reconfigurable Metamaterials Using Liquid Crystal Medium](#) [42]
• **University of Delaware**
  
  210 South College Avenue
  
  Newark, DE 19716

  **KAI, Inc.**
  
  6402 Needham Lane
  
  Austin, TX 78739
  
  Penelope Koo (512) 301-4170
  
  20-1-T12.05-4930 JSC

  *Additive Manufacturing of Continuous Carbon Fiber Reinforced Phthalonitriles for Thermal Protection* [43]

• **University of Hawaii**
  
  2440 Campus Road, Box 368
  
  Honolulu, HI 96822

  **Interstel Technologies, Inc.**
  
  91-1036 Wailikahi Street
  
  Ewa Beach, HI 96706
  
  Miguel Nunes (808) 388-1176
  
  20-1-T4.03-5557 JPL

  *Cooperative Control and Localization of Multiple Spacecraft using a Multi-Agent Mission Operations System* [44]

• **University of Hawaii at Manoa**
  
  2500 Campus Road
  
  Honolulu, HI 96822

  **Goodman Technologies, LLC**
  
  9551 Giddings Avenue Northeast
  
  Albuquerque, NM 87109
  
  William Goodman (505) 400-8169
  
  20-1-T12.05-5275 JSC

  *Moldable and Curable Silicon Carbide Prepreg For Hypersonic Thermal Protection Systems* [45]
- **University of Illinois at Urbana-Champaign**
  1901 South First Street, Suite A
  Champaign, IL 61820

  **ADVR, Inc.**
  2310 University Way, Building 1-1
  Bozeman, MT 59715
  Betsy Heckel (406) 522-0388
  20-1-T8.06-5430 GSFC

  Tunable Narrow-Band Bi-Photon Source in IR Spectral Region for Calibration of High-Performance Transition-Edge Sensors [46]

- **University of New Mexico-Main Campus**
  1700 Lomas Boulevard Northeast
  Albuquerque, NM 87131

  **Prewitt Ridge, Inc.**
  1610 West 7th Street, Unit 501
  Los Angeles, CA 90017
  Steven Massey (314) 591-7618
  20-1-T11.03-6433 MSFC

  Trusted Working Copies for Distributed Systems Engineering [47]

- **University of Puerto Rico**
  14, 2534 Avenue Universidad Suite 1401
  San Juan, PR 925

  **TDA Research, Inc.**
  12345 West 52nd Avenue
  Wheat Ridge, CO 80033
  John D. Wright (303) 940-2347
  20-1-T6.06-5500 JSC

  High Capacity Sorbents for Removal of Problematic Contaminants from Processed Wastewater [48]
• University of Tennessee Space Institute
  411 B.H. Goethert Parkway
  Tullahoma, TN 37388

  Gloyer-Taylor Laboratories, LLC
  112 Mitchell Boulevard
  Tullahoma, TN 37388
  Paul Gloyer (931) 455-7333
  20-1-T2.05-4862 GRC

  Standards for Impure Propellants [49]

• University of Utah
  201 Presidents Circle, Room 201
  Salt Lake City, UT 84102

  Innosense, LLC
  2531 West 237th Street, Suite 127
  Torrance, CA 90505
  Kisholoy Goswami (310) 530-2011
  20-1-T6.07-5335 KSC

  In-Space Plant Nutrient: Acicular Surface Modified Polymers for Aiding Faceted Sodium Chloride Separation from Urine [50]

• University of Washington
  4333 Brooklyn Avenue Northeast, Box 359472
  Seattle, WA 98195

  Convergent Manufacturing Technologies US
  1101 North Northlake Way, Suite 200
  Seattle, WA 98103
  Brian Coxon (206) 434-1976
  20-1-T12.01-4586 LaRC

  Process Simulation & Optimization for Thin-Ply Composites [51]
• **UNLV**
  4505 South Maryland Parkway
  Las Vegas, NV 89154

  **Geisel Software, Inc.**
  67 Millbrook Street
  Worcester, MA 1606
  Brian Geisel (508) 936-5099
  20-1-T4.03-6090 JPL

  [Robot Simulation Platform for Source Search and Mapping](#) [52]

• **Vanderbilt University**
  2101 West End Avenue
  Nashville, TN 37235

  **Busek Company, Inc.**
  11 Tech Circle
  Natick, MA 1760
  Judy Budny (508) 655-5565
  20-1-T6.05-6533 LaRC

  [Radiation Modeling of COTS Power Converters in a Highly Shield Space Environment](#) [53]

• **Virginia Tech**
  925 Prices Fork Road
  Blacksburg, VA 24061

  **Altius Space Machines, Inc.**
  3001 Industrial Lane, Unit #5
  Broomfield, CO 80020
  Jonathan Goff (801) 362-2310
  20-1-T4.03-5435 JPL

  [Autonomous In-space Assembly of Modular Structures](#) [54]

• **Western Kentucky University**
1906 College Heights Boulevard
Bowling Green, KY 42101

**Adelphi Technology, LLC**
2413 Nashville Road, Suite B8
Bowling Green, KY 42101
Charles Gary (650) 575-4555
20-1-T6.07-5715 KSC

[Compact Ethylene Monitor for NASA Space Missions](#) [55]

**Wichita State University**
1845 N. Fairmount
Wichita, KS 67260

**Electro Magnetic Applications**
7655 West Mississippi Avenue, Suite 300
Lakewood, CO 80226
Emily Hennerberg (720) 974-1215
20-1-T5.03-5050 KSC

[Numerical Simulation of Fields in Cavities with Detailed Antenna Modeling](#) [56]

**Worcester Polytechnic Institute**
100 Institute Road
Worcester, MA 50883

**Giner, Inc.**
89 Rumford Avenue
Newton, MA 2466
Cortney Mittelsteadt (781) 529-0529
20-1-T15.03-5033 GRC

[Enabling High Energy Density Li-ion Battery Using Solid Electrolytes](#) [57]

**Yale University**
206 Elm Street
New Haven, CT 6520

**Innosense, LLC**
2531 West 237th Street, Suite 127
Torrance, CA 90505
Kisholoy Goswami (310) 530-2011
20-1-T6.06-4928 JSC

[58] Nanomaterials Based In-Line Sensor for Ionic Silver in Spacecraft Potable Water Systems

[58] Nanomaterials Based In-Line Sensor for Ionic Silver in Spacecraft Potable Water Systems

[58] Nanomaterials Based In-Line Sensor for Ionic Silver in Spacecraft Potable Water Systems