Proposals Selected for Negotiation of Contracts

- **Adelphi Technology, LLC**
  2413 Nashville Road, Suite B8
  Bowling Green, KY 42101
  Charles Gary (650) 575-4555

  **Western Kentucky University**
  1906 College Heights Boulevard
  Bowling Green, KY 42101
  20-1-T6.07-5715 KSC

  Compact Ethylene Monitor for NASA Space Missions [1]

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

  **Massachusetts Institute of Technology**
  77 Massachusetts Avenue
  Cambridge, MA 2139
  20-1-T5.04-5429 GRC

  High-purity, high-rate, photon pair source for space-based entanglement distribution [2]

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

  **University of Illinois at Urbana-Champaign**
1901 South First Street, Suite A
Champaign, IL 61820
20-1-T8.06-5430 GSFC
Tunable Narrow-Band Bi-Photon Source in IR Spectral Region for Calibration of High-Performance Transition-Edge Sensors [3]

• Aegis Technology, Inc.
12630 Westminster Avenue, Suite G
Santa Ana, CA 92706
timothy lin (714) 554-5511

Cornell University
410 Thurston Avenue
Ithaca, NY
20-1-T15.03-5735 GRC

• Alphacore, Inc.
304 South Rockford Drive
Tempe, AZ 85281
Andrew Levy (503) 320-5466

Arizona State University
699 South Mill Avenue
Tempe, AZ 85281
20-1-T8.04-5368 GSFC
Metamaterials [5]

• Altius Space Machines, Inc.
3001 Industrial Lane, Unit #5
Broomfield, CO 80020
Jonathan Goff (801) 362-2310

Virginia Tech
925 Prices Fork Road
Blacksburg, VA 24061
20-1-T4.03-5435 JPL

Autonomous In-space Assembly of Modular Structures [6]

- Amethyst Research, Inc.
  123 Case Circle
  Ardmore, OK 73401
  Robert Kuester (580) 657-2575

University of California - Santa Barbara
Office of Research - 3227 Cheadle Hall
Santa Barbara, CA 93106
20-1-T5.04-6397 GRC

Ultra-Efficient Integrated Photonic Quantum Transceiver for High-Speed Quantum Communications [7]

- AnalySwift
  5413 Crus Corvi Road
  West Jordan, UT 84081
  Allan Wood (801) 599-5879

University of Central Florida
4000 Central Florida Boulevard
Orlando, FL 32816
20-1-T12.01-5412 LaRC

Modeling Nonlinear Viscoelasticity and Time-Dependent Yielding of Thin-Ply Composites [8]

- Applied Optimization, Inc.
  3040 Presidential Drive, Suite 100
  Fairborn, OH 45324
  Barbara Krivian (937) 431-5100

University of Dayton
300 College Park
Dayton, OH 45469
20-1-T8.04-6260 JPL

*Tunable, Reconfigurable Metamaterials Using Liquid Crystal Medium* [9]

- **ATSP Innovations**
  60 Hazelwood Drive
  Champaign, IL 61820
  Jacob Meyer (217) 778-4400

*Texas A&M Engineering Experiment Station*
7607 Eastmark Drive
College Station, TX 77840
20-1-T12.01-4984 LaRC

*Creep-Resistant Aromatic Polyester Thermosets for Thin-Ply Composites* [10]

- **Busek Company, Inc.**
  11 Tech Circle
  Natick, MA 1760
  Judy Budny (508) 655-5565

*Vanderbilt University*
2101 West End Avenue
Nashville, TN 37235
20-1-T6.05-6533 LaRC


- **Cactus Materials**
  7700 South River Parkway
  Chandler, AZ 85284
  Mohammed Rafiqul Islam (480) 213-4704

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

20-1-T6.06-5608 JSC

Long Term Uses of Potable Water Containing Silver Disinfectant in High Surface to Volume Ratio Metallic Surfaces [12]

- **Combustion Research and Flow Technology**
  
  6210 Keller's Church Road
  
  Pipersville, PA 18947
  
  Neeraj Sinha (215) 766-1520

  **University of Connecticut**
  
  438 Whitney Road Extension, U-1133
  
  Storrs, CT 6269
  
  20-1-T2.05-4812 GRC
  
  Design of Spray Cooling Systems for Chilldown of Propellant Tanks [13]

- **Convergent Manufacturing Technologies US**
  
  1101 North Northlake Way, Suite 200
  
  Seattle, WA 98103
  
  Brian Coxon (206) 434-1976

  **University of Washington**
  
  4333 Brooklyn Avenue Northeast, Box 359472
  
  Seattle, WA 98195
  
  20-1-T12.01-4586 LaRC
  
  Process Simulation & Optimization for Thin-Ply Composites [14]

- **CTEN Global Strategies, LLC**
  
  8415 Southwest 28th Place
  
  Gainesville, FL 32608
  
  Cason Chatham (770) 633-9169

  **Kennesaw State University**
  
  1000 Chastain Road
Kennesaw, GA 30144
20-1-T11.03-6333 GSFC

Hedera Hashgraph based Distributed Ledger for Aerospace Applications [15]

- **CubCrafters Inc.**
  1918 South 16th Avenue
  Yakima, WA 98903
  Pat Horgan (509) 895-9465

Oregon State University
153 Gilbert Hall
Corvallis, OR 97331
20-1-T15.04-5017 AFRC

ELAS, Electric Lift Augmenting Slats [16]

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

Regents of the University of Michigan
3003 South State Street
Ann Arbor, MI 48109
20-1-T15.04-5958 AFRC

Open Source Distributed Electric Propulsion MDAO Tool [17]

- **Docugami, Inc.**
  3500 South Dupont Highway
  Dover, DE 19901
  Sandy Moritz (425) 968-2380

Massachusetts Institute of Technology
77 Massachusetts Avenue
Cambridge, MA 2139
20-1-T11.04-6527 LaRC

Next Generation AI-Based Assisted Document Authoring, Recommendation and Understanding [18]

- **Edge Case Research, Inc.**
  
  3485 Butler Street
  
  Pittsburgh, PA 15201
  
  Brendon Ouimette (412) 455-5444

  **Carnegie Mellon University**
  
  5000 Forbes Avenue
  
  Pittsburgh, PA 15213
  
  20-1-T4.01-6224 ARC

  Robust Visual Perception Techniques for Intelligent and Adaptive Space Robotics [19]

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

  **Southwest Research Institute**
  
  6220 Culebra Road
  
  San Antonio, TX 78238
  
  20-1-T12.06-4917 JPL

  RAMBO: Rapid Additive Manufacturing Build Outcomes [20]

- **Electro Magnetic Applications**
  
  7655 West Mississippi Avenue, Suite 300
  
  Lakewood, CO 80226
  
  Emily Hennerberg (720) 974-1215

  **Wichita State University**
  
  1845 N. Fairmount
  
  Wichita, KS 67260
20-1-T5.03-5050 KSC

Numerical Simulation of Fields in Cavities with Detailed Antenna Modeling [21]

- **Formalloy Technologies, Inc.**
  
  2830 Via Orange Way, Suite H
  
  Spring Valley, CA 91978
  
  Melanie Lang (619) 377-9101

**New Mexico State University-Dona Ana**

1780 East University Avenue

Las Cruces, NM 88003

20-1-T12.06-6599 JPL

Data-Driven Modeling of Directed Energy Deposition (DED) for Defect-Free Builds using Real-Time Monitoring Approaches [22]

- **Geisel Software, Inc.**
  
  67 Millbrook Street
  
  Worcester, MA 1606
  
  Brian Geisel (508) 936-5099

**UNLV**

4505 South Maryland Parkway

Las Vegas, NV 89154

20-1-T4.03-6090 JPL

Robot Simulation Platform for Source Search and Mapping [23]

- **Geocent, LLC**
  
  111 Veterans Boulevard, Suite 1600
  
  Metairie, LA 70005
  
  Jeff Tomeny (504) 831-1900

**The University of Southern Mississippi**

118 College Drive, Box #5157

Hattiesburg, MS 39406
20-1-T13.01-5600 SSC

Intelligent Sensor Systems - 2020 [24]

- **Giner, Inc.**
  89 Rumford Avenue
  Newton, MA 2466
  Cortney Mittelsteadt (781) 529-0529

  **Worcester Polytechnic Institute**
  100 Institute Road
  Worcester, MA 50883
  20-1-T15.03-5033 GRC

  Enabling High Energy Density Li-ion Battery Using Solid Electrolytes [25]

- **Gloyer-Taylor Laboratories, LLC**
  112 Mitchell Boulevard
  Tullahoma, TN 37388
  Paul Gloyer (931) 455-7333

  **University of Tennessee Space Institute**
  411 B.H. Goethert Parkway
  Tullahoma, TN 37388
  20-1-T2.05-4862 GRC

  Standards for Impure Propellants [26]

- **Goodman Technologies, LLC**
  9551 Giddings Avenue Northeast
  Albuquerque, NM 87109
  William Goodman (505) 400-8169

  **University of Hawaii at Manoa**
  2500 Campus Road
  Honolulu, HI 96822
  20-1-T12.05-5275 JSC
Moldable and Curable Silicon Carbide Prepreg For Hypersonic Thermal Protection Systems [27]

- **Innosense, LLC**
  2531 West 237th Street, Suite 127
  Torrance, CA 90505
  Kisholoy Goswami (310) 530-2011

Yale University
206 Elm Street
New Haven, CT 6520
20-1-T6.06-4928 JSC

Nanomaterials Based In-Line Sensor for Ionic Silver in Spacecraft Potable Water Systems [28]

- **Innosense, LLC**
  2531 West 237th Street, Suite 127
  Torrance, CA 90505
  Kisholoy Goswami (310) 530-2011

University of Utah
201 Presidents Circle, Room 201
Salt Lake City, UT 84102
20-1-T6.07-5335 KSC

In-Space Plant Nutrient: Acicular Surface Modified Polymers for Aiding Faceted Sodium Chloride Separation from Urine [29]

- **Intelligent Automation, Inc.**
  15400 Calhoun Drive, Suite 190
  Rockville, MD 20855
  Mark James (301) 294-5221

Stanford University
450 Serra Mall
Palo Alto, CA 94304
20-1-T15.04-5315 AFRC
- **Interstel Technologies, Inc.**
  91-1036 Waililikahi Street
  Ewa Beach, HI 96706
  Miguel Nunes (808) 388-1176

**University of Hawaii**
2440 Campus Road, Box 368
Honolulu, HI 96822
20-1-T4.03-5557 JPL

  - **Cooperative Control and Localization of Multiple Spacecraft using a Multi-Agent Mission Operations System** [31]

- **KAI, Inc.**
  6402 Needham Lane
  Austin, TX 78739
  Penelope Koo (512) 301-4170

**University of Delaware**
210 South College Avenue
Newark, DE 19716
20-1-T12.05-4930 JSC

  - **Additive Manufacturing of Continuous Carbon Fiber Reinforced Phthalonitriles for Thermal Protection** [32]

- **Little Prairie Services**
  14 Dunkin Road
  Edgewood, NM 87015
  Roger Lenard (505) 220-8029

**Massachusetts Institute of Technology**
77 Massachusetts Avenue
Cambridge, MA 2139
20-1-T2.04-6118 MSFC
NTR Fuel Testing in MIT Reactor Facilities [33]

- **Nanohmics, Inc.**
  
  6201 East Oltorf Street, Suite 400
  
  Austin, TX 78741
  
  Mike Mayo (512) 389-9990

  **The University of Texas at Dallas**
  
  800 West Campbell Road
  
  Richardson, TX 75080
  
  20-1-T8.06-5681 GSFC

  On-Demand Single-Photon Sources for Correlated Calibration of Single Photon Detectors [34]

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

  **Oregon State University**
  
  153 Gilbert Hall
  
  Corvallis, OR 97331
  
  20-1-T12.05-6182 JSC

  Additive-Manufactured Ablative Thermal Protection Systems [35]

- **Orbit Logic, Inc.**
  
  7852 Walker Drive
  
  Greenbelt, MD 20770
  
  Ella Herz (301) 982-6234

  **University of Colorado Boulder**
  
  1111 Engineering Drive
  
  Boulder, CO 80309
  
  20-1-T4.03-5760 JPL

- **Orbit Logic, Inc.**
  7852 Walker Drive
  Greenbelt, MD 20770
  Ella Herz (301) 982-6234

  **Fraunhofer Center for Experimental Software Engineering**
  5700 Rivertech Court, Suite 210
  Riverdale, MD 20737
  20-1-T11.03-6321 MSFC

  **SCRAMBL (Space Communication Reconstruction and Mapping with Blockchain Ledgering)** [37]

- **Particle Matters, Inc.**
  2324 Venndale Avenue
  San Jose, CA 95124
  Sergey Gimelshein (818) 527-5432

  **Stanford University**
  450 Serra Mall
  Palo Alto, CA 94304
  20-1-T2.04-5261 MSFC

  **Advanced Design Tools for Electrosail Propulsion Systems** [38]

- **Physical Sciences, Inc.**
  20 New England Business Center
  Andover, MA 1810
  B. David Green (978) 689-0003

  **Auburn University**
  23 Samford Hall
  Auburn, AL 36849
  20-1-T13.01-5309 SSC

  **Intelligent Sensor Systems for Rocket Propulsion Testing** [39]
Physical Sciences, Inc.
20 New England Business Center
Andover, MA 1810
B. David Green (978) 689-0003

Board of Trustees of the University of Illinois (at Urbana-Champaign)
1901 South First Street, Suite A
Champaign, IL 61820
20-1-T5.04-5470 GRC
Doppler-Compensated Integrated Photonic Time-Bin Entanglement Transceiver [40]

Precision Combustion, Inc.
410 Sackett Point Road
North Haven, CT 6473
Anthony Anderson (203) 287-3700

University of Connecticut
438 Whitney Road Extension, U-1133
Storrs, CT 6269
20-1-T2.05-5203 GRC
Pressure and Low Temperature Tolerant, High Current Density Solid Electrolyte for Propellant Grade Reactants [41]

Prewitt Ridge, Inc.
1610 West 7th Street, Unit 501
Los Angeles, CA 90017
Steven Massey (314) 591-7618

University of New Mexico-Main Campus
1700 Lomas Boulevard Northeast
Albuquerque, NM 87131
20-1-T11.03-6433 MSFC
Trusted Working Copies for Distributed Systems Engineering [42]
• **QuesTek Innovations, LLC**
  1820 Ridge Avenue
  Evanston, IL 60201
  Kevin Creely (847) 425-8226

  **Northwestern University**
  633 Clark Street
  Evanston, IL 60208
  20-1-T12.06-5463 JPL
  [Improved Part-Scale Modeling of Additive Manufacturing Processes](#) [43]

• **Research in Flight**
  1919 North Ashe Court
  Auburn, AL 36830
  Roy Hartfield (334) 444-8523

  **Auburn University**
  23 Samford Hall
  Auburn, AL 36849
  20-1-T15.04-4887 AFRC

• **Rocket Studios**
  16037 Bassett Street
  Lake Balboa, CA 91406
  Daniel Sinor (310) 990-5079

  **California State University-Northridge**
  18111 Nordhoff Street
  Northridge, CA 91330
  20-1-T4.03-6408 JPL
  [Hierarchical State Machine Visualization in Multi-Robot System](#) [45]
• Soar Technology, Inc.
  3600 Green Court, Suite 600
  Ann Arbor, MI 48105
  Lindsay Bayles (734) 887-7609

Georgia Tech Research Institute (GTRI)
  205 14th Street Northwest
  Atlanta, GA 30318
  20-1-T11.04-4665 LaRC

  Ada Phase I [46]

• Southwest Sciences, Inc.
  1570 Pacheco Street, Suite E-11
  Santa Fe, NM 87505
  Alan Stanton (505) 984-1322

Southwest Research Institute
  6220 Culebra Road
  San Antonio, TX 78238
  20-1-T6.07-5408 KSC

  Real Time Ethylene Monitor for Plant Growth Management [47]

• SPEC Sensors LLC
  8430 Central Avenue
  Newark, CA 94560
  David Peaslee (510) 574-8300

Curators of the University of Missouri on Behalf of UMSL
  One University Boulevard
  St. Louis, MO 63121
  20-1-T4.04-5080 ARC

  Autonomous Environmental Monitoring and Management Platform for Remote Habitats [48]
• Stottler Henke Associates, Inc.
  1650 South Amphlett Boulevard, Suite 300
  San Mateo, CA 94402
  Nate Henke (650) 931-2719

  University of Colorado Boulder
  1111 Engineering Drive
  Boulder, CO 80309
  20-1-T4.04-5250 KSC

  Autonomous Payload Operations on the Lunar Gateway [49]

• Stottler Henke Associates, Inc.
  1650 South Amphlett Boulevard, Suite 300
  San Mateo, CA 94402
  Nate Henke (650) 931-2719

  Montana State University
  Office of Sponsored Programs, PO Box 172470
  Bozeman, MT 59717
  20-1-T4.04-5249 ARC

  Gateway Management through Adaptive, Autonomous, Fault Identification & Diagnosis and Reconfiguration/Replanning/Rescheduling Optimization [50]

• Streamline Automation, LLC
  3100 Fresh Way Southwest
  Huntsville, AL 35805
  Alton Reich (256) 713-1220

  Alabama A&M University
  4900 Meridian Street North
  Huntsville, AL 35811
  20-1-T6.05-5155 LaRC

  Testing of COTS Systems in Space Radiation Environments [51]
• Systems and Proposal Engineering Company (dba SPEC Innovations)
  10440 Balls Ford Road, Suite 230
  Manassas, DE 20109
  Steven Dam (540) 272-0013

  **George Mason University**
  4400 University Drive
  Fairfax, VA 22030
  20-1-T11.04-5376 LaRC

  [Analytic Standard Operating Procedure Digital Assistant (ASOPDA)](52)

• **TDA Research, Inc.**
  12345 West 52nd Avenue
  Wheat Ridge, CO 80033
  John D. Wright (303) 940-2347

  **Georgia Tech Research Institute (GTRI)**
  250 14th Street Northwest
  Atlanta, GA 30318
  20-1-T2.05-5396 GRC

  [A New Oxygen Recovery Process to Reduce Waste from Propellant Tanks](53)

• **TDA Research, Inc.**
  12345 West 52nd Avenue
  Wheat Ridge, CO 80033
  John D. Wright (303) 940-2347

  **University of Puerto Rico**
  14, 2534 Avenue Universidad Suite 1401
  San Juan, PR 925
  20-1-T6.06-5500 JSC

  [High Capacity Sorbents for Removal of Problematic Contaminants from Processed Wastewater](54)

• **Texas Research Institute Austin, Inc.**
Texas State University
601 University Drive
San Marcos, TX 78666
20-1-T12.05-5304 JSC

Additive Manufacturing (AM) of Thermal Protection Systems (TPSs) Using Preceramic Polymer Resin [55]

TRACLabs, Inc.
100 North East Loop 410, Suite 520
San Antonio, TX 78216
David Kortenkamp (281) 461-7886

Johns Hopkins University Applied Physics Laboratory LLC
11100 Johns Hopkins Road
Laurel, MD 21044
20-1-T4.01-5037 ARC

Integrating ROS 2 with the Core Flight System [56]

Vistex Composites, LLC
11 Opus Boulevard, Suite B
Schenectady, NY 12306
Jaron Kuppers (508) 340-7873

Union College
807 Union Street
Schenectady, NY 12308
20-1-T12.01-6578 LaRC

OOA Process for Manufacture of Large Thin Gauge Composites [57]

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

South Dakota School of Mines and Technology
501 East Saint Joseph Street
Rapid City, SD 57701
20-1-T2.04-6822 MSFC

Additive Manufacturing by High-Pressure Cold Spray [58]