Proposals Selected for Negotiation of Contracts

- **Arizona State University-Polytechnic**
  P.O. Box 876011
  Tempe, AZ 85287

  **Alphacore, Inc.**
  304 South Rockford Drive
  Tempe, AZ 85281
  Esko Mikkola (480) 494-5618
  22-1-T4.01-2229 ARC


- **Arizona State University-Tempe**
  University Drive and Mill Avenue
  Tempe, AZ 85281

  **Alphacore, Inc.**
  304 South Rockford Drive
  Tempe, AZ 85281
  Esko Mikkola (480) 494-5618
  22-1-T13.01-2230 SSC


- **Board of Trustees of the University of Illinois (at Urbana-Champaign)**
  3400 North Charles Street
  Champaign, IL 61820

  **Ten One Aerospace LLC**
  1012 10th Street NorthEast
Assembly of Large Aperture Space Telescopes in Cislunar Space Using a Swarm of Autonomous Small Satellites [3]

- Board of Trustees of the University of Illinois (at Urbana-Champaign)
  3400 North Charles Street
  Champaign, IL 61820

  Physical Sciences, Inc.
  20 New England Business Center
  Andover, MA 01810
  William Marinelli (978) 738-8226
  22-1-T5.04-1819 GRC
  Photonic Integrated Circuit Assisted Single Photon Detectors (PICA SPDs) [4]

- Cal Poly Corporation
  500 Lincoln Drive
  San Luis Obispo, CA 93407

  Empirical Systems Aerospace, Inc.
  3580 Sueldo Street
  San Luis Obispo, CA 93401
  Andrew Gibson (805) 704-1865
  22-1-T15.04-1855 AFRC
  Wind Tunnel and Flight Testing of Scalable Modular Aerial Research Testbed [5]

- Carnegie Mellon University
  5000 Forbes Avenue
  Pittsburgh, PA 15213

  Nokomis, Inc.
  310 5th Street
Charleroi, PA 15022

Thomas Ruschel (724) 747-0703

22-1-T10.04-1383 ARC


- Carnegie Mellon University
  5000 Forbes Avenue
  Pittsburgh, PA 15213

Astrobotic Technology, Inc.
  1016 North Lincoln Avenue
  Pittsburgh, PA 15233

Andrew Horchler (216) 272-3882

22-1-T10.03-2033 JPL

Efficient Distributed State Estimation for Swarm Robotics [7]

- Duke University
  103 Allen Building
  Durham, NC 27708

Nanohmics, Inc.
  6201 East Oltorf Street, Suite 400
  Austin, TX 78741

Mike Mayo (512) 389-9990

22-1-T10.04-1898 ARC

Demonstration of Space-Qualified Environmental Evaluation Drones with Wireless Intelligent Networked Data Processing (SPEEDWINDs) [8]

- Embry-Riddle Aeronautical University-Daytona Beach
  600 S Clyde Morris Boulevard
  Daytona Beach, FL

Wayfarer Aircraft Research and Development
  8505 Rockledge Road
• Florida Institute of Technology

150 West University Boulevard

Melbourne, FL

NYRAD, Inc

274 East Eau Gallie Boulevard, Suite 140

Indian Harbour Beach, FL 32938

Rhonda Lyons (321) 482-4944

22-1-T10.05-2368 LaRC

The Exploration Medical Ecosystem Design Infrastructure (ExMEDI): system to build trust within Cyber-Physical-Human (CPH) teams. [10]

• Georgia Tech Research Corporation (GTRC)

5303

Atlanta, GA 30318

Physical Sciences, Inc.

20 New England Business Center

Andover, MA 01810

William Marinelli (978) 738-8226

22-1-T8.07-1822 GSFC


• Iowa State University

4000 Central Florida Boulevard

Ames, IA

Elder Research, Inc.

300 West Main Street, Suite 301
Charlottesville, VA 22903
William Goodrum (434) 973-7673
22-1-T10.05-1152 LaRC

Uncertainty Quantification of Representations of Unknown Dynamic Systems through Universal Differential Equations [12]

- **Johns Hopkins University**
  3400 North Charles Street
  Baltimore, MD

  sci_zone
  17133 Inavale
  Holland, MI 49424
  Andrew Santangelo (505) 205-8315
  22-1-T10.04-1854 ARC


- **Michigan Technological University**
  103 Allen Building
  Houghton, MI

  Lunar Outpost, Inc.
  17700 South Golden Road, Unit 102
  Golden, CO 80401
  Justin Cyrus (908) 577-4014
  22-1-T7.04-2186 KSC


- **Michigan Technological University**
  103 Allen Building
  Houghton, MI

  MTRI, Inc.
  3600 Green Court, Suite 100
Ann Arbor, MI 48105
Gregory Leonard (734) 913-6871
22-1-T10.03-1993 JPL


- **New York Institute of Technology**
  One Grand Avenue
  Old Westbury, NY

**X-wave Innovations, Inc.**
555 Quince Orchard Road, Suite 510
Gaithersburg, MD 20878
Jennifer Duan (301) 200-8368
22-1-T13.01-2449 SSC

[16] **A Wireless, Thin-Film Surface Acoustic Wave (SAW) Sensor System for Rocket Propulsion Test Applications**

- **New York University**
  70 Washington Square South
  New York, NY

**Air Company Holdings Inc**
407 Johnson Avenue
Brooklyn, NY 11206
Stafford Sheehan (774) 644-4320
22-1-T7.05-1301 GRC

[17] **Single-step production of kerosene-based fuels from carbon dioxide and hydrogen**

- **New York University**
  70 Washington Square South
  New York, NY

**Space Villages Inc.**
1044 Alderbrook Lane
San Jose, CA 95129
Adolfo Nemirovsky (408) 772-8063
22-1-T11.06-2171 JSC

Hyperrealistic, precise position, multi-astronaut training with XR Redirected Walking [18]

North Carolina State University at Raleigh
2701 Sullivan Drive
Raleigh, NC 27695

Paragon Space Development Corporation
3481 East Michigan Street
Tucson, AZ 85714
Joel Johnson (520) 382-4854
22-1-T6.08-1881 JSC

Spacesuit Cover against the Abrasive Lunar Environment (SCALE) & eXploration Textile for high Oxygen eNvironments (xTON) [19]

Oakwood University
7000 Adventist Boulevard NorthWest
Huntsville, AL

SSS Optical Technologies, LLC
515 Sparkman Drive, Suite 122
Huntsville, AL 35816
Sergey Sarkisov (256) 489-0081
22-1-T5.05-2115 MSFC

UV stable coating for sail-embedded PV power [20]

Ohio State University-Main Campus
190 N. Oval Mall
Columbus, OH

Srco, Inc.
2724 Sawbury Boulevard
Columbus, OH 43235
Andrea Pollick (614) 799-0664
22-1-T5.04-1093 GSFC

*Compact Temperature Tolerant Quantum Entangled Light Source* [21]

- **Purdue University - Main Campus**
  155 South Grant Street
  West Lafayette, IN 47907

  **AnalySwift**
  444 Jennings Street
  West Lafayette, IN 47906
  Allan Wood (801) 599-5879
  22-1-T12.07-1417 LaRC

  *Tool for Thermomechanical Design of Tailorable Composites and Hybrid Material Systems* [22]

- **Rector & Visitors of the University of Virginia**
  PO Box 400195
  Charlottesville, VA 22904

  **Innosense, LLC**
  2531 West 237th Street, Suite 127
  Torrance, CA 90505
  Kisholoy Goswami (310) 530-2011
  22-1-T14.01-1651 GRC

  *Nanomaterials Based in situ Hydrogen Sensor for Oxygen Process Streams* [23]

- **Regents of the University of Colorado**
  3100 Marine Street
  Boulder, CO 80303

  **Opterus Research and Development, Inc.**
  815 14th Street SouthWest, Suite C200
Loveland, CO 80537
Thomas Murphey (505) 250-3006
22-1-T5.05-2204 MSFC
Solar Sail Tubular Mast [24]

- Rochester Institute of Technology
  1 Lomb Memorial Drive
  Rochester, NY 14623

  Aktiwave
  150 Lucius Gordon Drive
  West Henrietta, NY 14586
  Christophe Dorrer (585) 355-2706
  22-1-T8.07-1782 GRC
  Femtosecond Laser Inscription of 3D Waveguide Beam Splitters and Integrated Photonic Circuits for Mid-IR sensing [25]

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

  TRACLabs, Inc.
  100 Northeast Interstate 410 Loop #520
  San Antonio, TX 78216
  David Kortenkamp (281) 461-7886
  22-1-T10.04-2569 ARC
  Multi-Agent Anomaly Resolution System (MaARS) [26]

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

  Nanohmics, Inc.
  6201 East Oltorf Street, Suite 400
Austin, TX 78741
Mike Mayo (512) 389-9990
22-1-T5.05-2038 MSFC
Solar Sail Integrated Antenna Technology [27]

• The Pennsylvania State University
  110 Technology Building
  University Park, PA 16802

Blue Ridge Research and Consulting
  29 North Market Street, Suite 700
  Asheville, NC 28801
  Josh Mellon (828) 252-2209
  22-1-T15.04-1263 AFRC
Full-Scale eVTOL Acoustic Measurements, Modeling, Scaling, and Validation [28]

• The University of California San Diego
  9500 Gilman Drive, Mail Code 0934
  La Jolla, CA 92093

ADVR, Inc.
  2310 University Way, Building 1-1
  Bozeman, MT 59715
  Betsy Heckel (406) 522-0388
  22-1-T8.06-1605 GSFC
High brightness, waveguide-based IR quantum light sources [29]

• The University of Central Florida Board of Trustees
  70 Washington Square South
  Orlando, FL 32826

Cislune Company
  301 North Almansor Street
  Alhambra, CA 91801
Erik Franks (661) 390-1060
22-1-T7.04-1066 KSC

Cislune Regolith Pathways and Landing Pads [30]

- The University of Texas at Austin
  110 Inner Campus Drive
  Austin, TX

Omega Optics, Inc.
8500 Shoal Creek Boulevard, Building 4, Suite 200
Austin, TX 78757
Gloria Chen (512) 996-8833
22-1-T8.07-2594 GSFC

Highly Efficient Atmospheric Gases Detections Using Integrated Vertical Crystal Waveguide Arrays [31]

- The University of Texas at San Antonio
  1644
  San Antonio, TX 78249

Astroport Space Technologies, Inc.
110 East Houston Street, 7th Floor
San Antonio, TX 78205
Sam Ximenes (210) 404-2981
22-1-T7.04-1851 KSC

Lunar Surface Site Preparation for Landing/Launch Pad and Blast Shield Construction [32]

- University of California - Davis
  1850 Research Park Drive, Suite 300
  Davis, CA 95618

TRACLabs, Inc.
100 Northeast Interstate 410 Loop #520
San Antonio, TX 78216
David Kortenkamp (281) 461-7886
22-1-T4.01-1828 ARC

**ROM3SA: Improved Situational Awareness for Remotely Operating Versatile Semi-Autonomous Robot Systems** [33]

- **University of California - Santa Barbara**
  7000 Adventist Boulevard NorthWest
  Santa Barbara, CA 93106

**Systems & Processes Engineering Corporation**
4120 Commercial Center Drive, Suite 500
Austin, TX 78744
Natalie Welp (512) 691-8171
22-1-T5.04-2446 GRC
**Diamond Quantum Memory** [34]

- **University of Central Florida**
  4000 Central Florida Boulevard
  Orlando, FL

**Buendea,LLC.**
24 Sw 22nd Road
Miami, FL 33129
Julian Reyes (305) 510-7868
22-1-T11.06-2113 JSC
**Real-Time and Cloud-based Simulation Processing for Digital Twin Environments** [35]

- **University of Colorado Boulder**
  OCG, 3100 Marine Street, Room 481, 572 UCB
  Boulder, CO 80303

**Diamond Age Technology LLC**
15714, Crestbrook Drive
Houston, TX 77059
John Blackwell (512) 470-2817

22-1-T11.06-1681 GSFC

Hyper-realistic Elastically Computed Topologies in Adaptive Reality Environments (HECTARE) [36]

- University of Colorado Boulder
  70 Washington Square South
  Boulder, CO 80309

  Aurora Engineering
  4 Redbud Court
  Potomac, MD 20854
  Alexander Barrie (814) 441-6410
  22-1-T10.05-2150 GSFC

  Module for Event Driven Operations on Spacecraft (MEDOS) [37]

- University of Dayton Research Institute
  300 College Park
  Dayton, OH 45469

  CFD Research Corporation
  6820 Moquin Drive NorthWest
  Huntsville, AL 35806
  Silvia Harvey (256) 715-6918
  22-1-T12.07-1523 LaRC

  Design and Optimization Toolkit for Advanced Tailorable Composites [38]

- University of Dayton Research Institute
  300 College Park
  Dayton, OH 45469

  Orbit Logic, Inc.
  7852 Walker Drive
  Greenbelt, MD 20770
  Ella Herz (301) 982-6234
22-1-T4.01-1810 ARC

Microgravity Environment Autonomy for Robotic Spacecraft (MEARS) [39]

- University of Delaware
  Northern Boulevard
  Newark, DE 19716

  Phase Sensitive Innovations, Inc.
  116 Sandy Drive
  Newark, DE 19713
  Ahmed Sharkawy (302) 898-5544
  22-1-T8.07-2014 GRC
  Electro-Optic Photonic Integrated Circuits in Thin Lithium Niobate [40]

- University of Delaware
  Northern Boulevard
  Newark, DE 19716

  Intact Solutions
  345 West Washington Avenue Suite 301
  Madison, WI 53703
  Mary Freytag (608) 469-7292
  22-1-T12.07-1654 LaRC
  Intact Fiber: An Application Programming Interface for the Design, Simulation, and Optimization of Tow-Steered Composites [41]

- University of Delaware
  Northern Boulevard
  Newark, DE 19716

  STF Technologies, LLC
  18 Shea Way Suite 101-102
  Newark, DE 19713
  Richard Dombrowski (716) 799-5935
22-1-T6.08-1716 JSC

Multi-Functional Environmental Protection Garment Shell Textile for Extreme Surface Environments [42]

- University of Florida
  600 S Clyde Morris Boulevard
  Gainesville, FL 32611

  Interdisciplinary Consulting Corporation
  5745 Southwest 75th Street, #364
  Gainesville, FL 32608
  Deontae Lafayette (407) 697-3697

22-1-T13.01-1499 SSC

WIRA - Wireless Instrumentation for Rocket Applications [43]

- University of Houston
  212 E. Cullen Building
  Houston, TX

  Tietronix Software, Inc.
  1331 Gemini Avenue, Suite 300
  Houston, TX 77058
  Sicilia Liranzo (832) 557-1170

22-1-T11.06-2398 JSC

Shared immersive XR Hyper-Realistic Environment for Extravehicular Activity Surface Operations [44]

- University of North Texas
  1155 Union Circle #305250
  Denton, TX 76203

  L'Garde, Inc.
  15181 Woodlawn Avenue
  Tustin, CA 92780
  Larry Beebe (714) 259-0771
22-1-T12.07-1295 LaRC

Design Tool for Highly Accurate Shape and Structural Evaluation of Space Antennas and Structures made with Tailorable Composites - SMART [45]

- **University of Notre Dame**
  400 Main Building
  Notre Dame, IN

**Gossamer Space**
  116 Beth Drive
  Lansdale, PA 19446
  Charles West (828) 582-9051

22-1-T5.05-1029 MSFC

Testing and Characterization of A Graphene/Polyethylene Nanocomposite for Solar Sail Applications [46]

- **University of Southern California**
  3720 South Flower Street, 3rd Floor
  Los Angeles, CA 90089

**Contour Crafting Corporation**
  215 South Douglas Street
  El Segundo, CA 90245
  Behrokh Khoshnevis (310) 430-5255

22-1-T7.04-1162 KSC

Novel Payload Conveyance System - Demonstration in Planetary Berm Construction [47]

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

**CFD Research Corporation**
  6820 Moquin Drive NorthWest
  Huntsville, AL 35806
  Silvia Harvey (256) 715-6918
22-1-T8.07-1524 GSFC

Programmable Photonic Integrated Circuits (PICs) for Radio Frequency (RF) applications [48]

• University of Wisconsin-Madison
  500 Lincoln Drive
  Madison, WI

Protoinnovations, LLC
  100 43rd Street
  Pittsburgh, PA 15201
  Dimitrios Apostolopoulos (412) 916-8807
  22-1-T4.01-2647 ARC

A Software Framework for Advancing Perception Capabilities for Rovers Operating in Harsh Lunar Environments [49]

• Utah State University
  1415 Old Main Hill, Room 64
  Logan, UT 84322

Nexolve Holding Company, LLC
  290 Dunlop Boulevard, Southwest, Suite 200
  Huntsville, AL 35824
  Paul DuPre (256) 836-7785
  22-1-T5.05-1391 MSFC

Embedded Sail Antenna Technology [50]

• Virginia Polytechnic Institute and State University
  300 Turner Street Northwest, Suite 4200
  Blacksburg, VA 24061

Nanosonic, Inc.
  158 Wheatland Drive
  Pembroke, VA 24136
  Amanda Moye (540) 626-6266
22-1-T6.08-1473 JSC

NanoLayered Extruded Textiles for Extreme Surface Environments and High Oxygen Atmospheres [51]

- Virginia Polytechnic Institute and State University
  300 Turner Street Northwest, Suite 4200
  Blacksburg, VA 24061

  Nanosonic, Inc.
  158 Wheatland Drive
  Pembroke, VA 24136
  Amanda Moye (540) 626-6266
  22-1-T12.07-1475 LaRC

  Design Tools for Lightweight Affordable Hybrid Space Exploration Cryotanks [52]

- Virginia Tech
  345 Goodwin Hall
  Blacksburg, VA 24061

  M4 Engineering, Inc.
  4020 Long Beach Boulevard
  Long Beach, CA 90807
  Kevin Roughen (562) 981-7797
  22-1-T12.07-2715 LaRC

  Topology Optimization for Design of Highly Tailored Composites for AFP Manufacturing [53]