MMA DESIGN, LLC
2000 Taylor Avenue, Suite 200 · Louisville · CO · 80027 · USA
www.mmadesignllc.com

PRESS RELEASE

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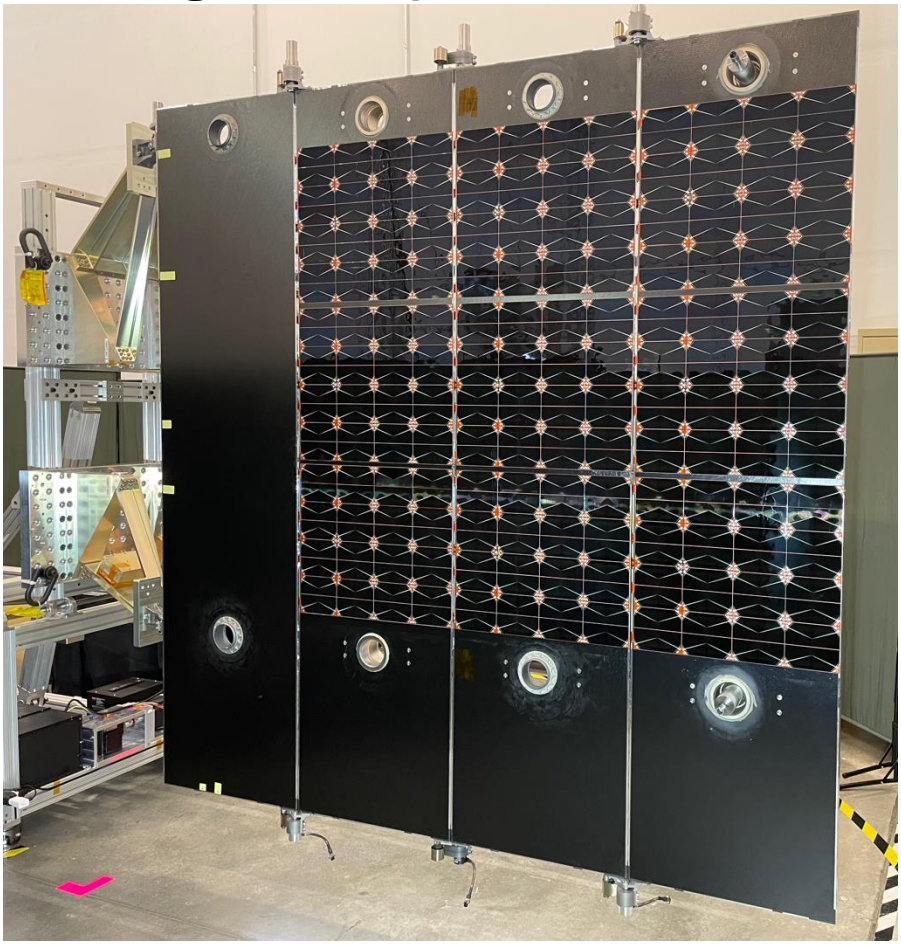
MMA Design Delivers Space Solar Power Initiative on SSPIDR Program



SSPIDR Photovoltaic wing deployment. Photo Credit: MMA Design

LOUISVILLE, CO – In partnership with Northrop Grumman and the Air Force Research Laboratory (AFRL), MMA Design has developed and delivered a Flight Deployment Subsystem for AFRL's Arachne flight experiment. Arachne utilizes components known as "sandwich tiles" to perform solar-to-RF conversion in which solar energy is collected, converted to RF energy, and beamed to precise locations on Earth for conversion back into useable power. Arachne is a stepping stone in AFRL's overarching goal of a larger scale system capable of beaming energy wherever it is needed – including remote military bases or even communities in need of temporary power when ravaged by climate emergencies.

MMA's Deployment Subsystem is the structural backbone of Arachne's primary payload, providing a mounting platform for the solar-to-RF electronics with controlled deployment and on-orbit segment angular positional adjustability. The Deployment Subsystem includes a dual-port structural adapter for Northrop Grumman's ESPAStar platform, structural panels for the sandwich tiles, hinges, segment angular position adjustment mechanisms, photovoltaic tiles, a launch restraint / release system, and a camera system for monitoring deployment. The entire subsystem was custom designed and fabricated by MMA Design to meet Northrop Grumman's and AFRL's specifications for this experiment. The assembly is being delivered to Northrop Grumman for final integration and test with a planned launch in 2025.

This year, MMA Design will be involved in post-delivery integration support at Northrop Grumman's facility.

Artist's rendering of the Air Force Research Laboratory's Arachne flight experiment on orbit. Credit: Partise

About the Mission: The Arachne flight experiment is the flagship experiment within the Space Solar Power Incremental Demonstrations and Research (SSPIDR). SSPIDR's goal consists of a unique concept that will enable the capture of solar energy in space to be returned precisely to where it is most needed on Earth. According to a recent Air Force Research Laboratory (AFRL) press release, "SSPIDR is part of the AFRL's 'big idea pipeline' to ensure we continue to develop game-changing technologies for our Air Force, DoD, nation and world."

ABOUT MMA Design: *Space is our passion and exploring is in our DNA.*
Headquartered in Louisville, Colorado, our creative and agile team is creating innovative, ingeniously packaged, disruptive deployable payload solutions that are revolutionizing the state-of-the-art. From R+D to flight, we think out of the box to put more into the box for your mission.

Learn more at www.mmadesignllc.com

Media Contact: **SANDY SORZANO**
People + Brand
d: 720-728-8491
m: 310-621-0266
e: ssorzano@mmadesignllc.com
a: 2000 Taylor Avenue, Suite 200 Louisville, CO 80027
www.mmadesignllc.com

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