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April 18, 2022

TO:
Applied Science & Technology Research
Organization of America (ASTRO America)
6701 Democracy Blvd., Suite 300
Bethesda, Maryland 20817

Re: AM Forward

Honeywell International, Inc. is pleased to join the federal government in implementing *AM Forward*—a voluntary compact aimed at strengthening U.S. supply chains by supporting U.S.-based suppliers' adoption and deployment of additive manufacturing (AM) or industrial 3D printing capabilities.

AM is a leading-edge production technology that is important to U.S. global competitiveness; it has several benefits, including forming geometries that may not be attainable through any other medium. Aerospace and defense companies use this technology to significantly consolidate part-counts and design high-performing components across several platform-types, ranging from hypersonic programs to aircraft engines.

AM also has the potential to improve the agility of casting and forging supply chains where legacy processes are often resource- and time-intensive. If appropriately qualified and applied, we believe additive manufacturing can be used to reduce parts' lead-times substantially, even under current supply chain conditions. Doing so will require considerable support to our suppliers—especially small and medium sized enterprises.

Through AM Forward, Honeywell's goal will be to ensure that within a 12-to-24-month period multiple U.S.-based suppliers have increased their ability to additively produce parts, enhancing their competitiveness, agility, and productivity. Such an initiative will demonstrate clear, consistent, and growing demand for additively produced parts, provide training to suppliers' workers to support broader additive capabilities, engage in standards development, and offer technical assistance. We appreciate the federal government's support of these efforts through U.S. Government financing programs, capacity building, workforce development initiatives, and other mechanisms.

Specifically, Honeywell will support the goals of AM Forward by committing to:

- Targeting small/medium sized suppliers to compete on request for quote (RFQ) packages sent out for products, machinery, manufacturing tooling, and/or manufacturing process development utilizing additive or related technologies.

- Targeting the external sourcing of additively manufactured processes and parts from a small/medium sized supplier.
- Support for qualifying small/medium sized manufacturers and training to meet Honeywell qualification requirements.
- Technical assistance in part design, data generation, machine operation, post-processing, part inspection / quality management to introduce AM parts and processes for manufacture during development and production program phases
- Work with other OEM's and the US Government to explore establishing an AM material consortium and share AM material properties and design data.
- Develop the framework to establish an AM approved supplier list to simplify and accelerate the procurement of AM parts.

To achieve the foregoing objectives, Honeywell is committed to working with the other participants in AM Forward, and in concert with U.S. Government agencies to improve the capability, agility, and competitiveness of our supply base. This activity will require engagement at both a working-level and a senior executive-level along with government officials and other industry peers to support a range of activities by industry, government, and non-profits. We understand as an AM Forward participant, we will be supported with staff coordination from 501(c)(3) nonprofit organizations including the Applied Science & Technology Research Organization of America (ASTRO America) and Gettysburg College's Eisenhower Institute.

Additionally, as an industry-participant, Honeywell will support efforts by suppliers within its sourcing network to take part in key U.S. government programs associated with AM Forward. For example, we believe that various federal agencies can play an important role in accelerating small and medium sized manufacturer (SMM) access to necessary capital, workforce training, technical assistance, and technology transition support.

We know that the competitiveness of the U.S. industrial base, including Honeywell, relies on the capability of tens-of- thousands of SMMs producing and post-processing critical aerospace parts. Through AM Forward, we believe we can work with you to accelerate AM adoption at scale, increasing the agility, capacity, and resiliency of U.S. supply chains; and supporting and sustaining good-paying jobs across the United States.

Thank you for your leadership on this important initiative.

Sincerely,



Sunny Pandya
Vice President, Procurement
Strategic Sourcing
Honeywell Aerospace