AEROSPACE

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Transmitted via Electronic Mail

19 August 2021

National Institute of Standards and Technology
100 Bureau Dr, Gaithersburg, MD 20899

Attention: NIST AI Risk Management Framework (AIframework@nist.gov)

Subject: The Aerospace Corporation response to NIST RFI "Artificial Intelligence Risk Framework"

Reference: Request for Information (RFI) – Artificial Intelligence Risk Framework

Dear Ms. Tabassi,

The Aerospace Corporation (Aerospace) wants to thank you for the opportunity to respond to your Request For Information (RFIs) on Artificial Intelligence (AI) Risk Management Framework (RMF) (due 8/19/21).

As you know from our earlier interaction, dialogue, and input on the NIST effort on AI Standards, directed by an earlier Presidential Executive Order on AI, Aerospace is a Federally Funded Research and Development Center (FFRDC) with a 60+ year heritage providing Mission Assurance for the Space Enterprise. With the increasing adoption and interest in AI within the space community, extending our Mission Assurance offerings to AI-enabled space systems is a natural evolution.

In response to the AI RMFRFI, Aerospace proffers two high quality resources:

A. "A Framework for Trusted Artificial Intelligence in High-Consequence Environments": This document presents a solid framework for Trusted AI in use cases where there is high risk and little margin for error, such as space and related complex systems, a topic area where we are the premier FFRDC for the U.S. Government and their private sector partners. This should be a truly informative piece for developing the AI Risk Management Framework (RMF) agnostic and regardless of domain.

B. "A Framework for Developing Trust in Artificial Intelligence": This is a publicly released issuance that describes the relevance of Aerospace's AI RMF framework model to policymakers.

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For further consideration in future engagements, we have another document, currently in final stages of development, that is pertinent to this RFI which may be made available upon public release.

    C. "Trusted Artificial Intelligence for Flight Infusion and Science Service": A cooperative partnership between Aerospace and JPL to: (1) apply the Aerospace framework to two JPL space exploration programs and collect lessons learned, (2) develop best practices for future JPL AI/ML autonomy software to increase trust.

Thank you for this opportunity to collaborate with you and your office as a trusted and valued partner. We also want to congratulate you on being appointed to the White House Task Force on AI Research Resource (we'll respond to that RFI separately). It is an honor to work with you and we compliment you on your appointment. We stand by to further collaborate and partner with you on future AI-related efforts.

Any questions regarding this response or attachments can be directed to Mr. James M. Myers at 703-812-2012 or via email at james.m.myers@aero.org.

V/R

James M. Myers
Vice President, Civil Systems Group
The Aerospace Corporation

Attachments:

    1. A Framework for Trusted Artificial Intelligence in High-Consequence Environments (Filename: "A Framework for Trusted Artificial Intelligence in High-Consequence Environments.pdf")
    2. A Framework for Developing Trust in Artificial Intelligence (Filename: "A Framework for Developing Trust in Artificial Intelligence.pdf")