

HYPERSONICS *Cafe*

Objective

Mature manufacturing technology processes for end-item cost reduction and increased production capacity of hypersonic weapon systems

OSD ManTech DMAG/PDM Program Thrusts



MOC3HA: Manufacturing of C/C Composites for Hypersonic Applications 2.0 (Plus-Ups)

- Extend impact from experimental learning to industry practice
- Transition technology(ies) to Programs of Record



Task Order
Q2CY23



GAMMA-H: Growing AM Maturity for Airbreathing Hypersonics

- Remove AM propulsion systems as pacing item for HCM production
- Address manufacturing risks identified by MRAs to accelerate adoption



RFS Release
28 Oct 2022



JAHVAA: Joint Acceleration of Hypersonic Vehicle Aerostructure Alternatives

- Milestones-based competition to demonstrate alternatives to C/C
- CMC and refractory alloy systems for Boost Glide TPS



RFS Release
18 May 2023

	FY23	FY24	Totals
GAMMA-H (Scramjet Additive)	\$60M	\$66M	\$126M
MOC3HA 2.0	\$12M	\$0M	\$12M
JAHVAA (Metals & Ceramics)	\$15M	\$37M	\$52M
Totals	\$87M	\$103M	\$190M

Technical Team



**MANUFACTURING SCIENCE AND TECHNOLOGY PROGRAM
HYPERSONICS "CAFE" INVESTMENTS**

