Team, are you looking at options to share the data between the government and multiple vendors to that you can iterate faster and control sharing?	Solutions exist to realize faster integration and sharing control. There are specific applications that do require multiple vendor interaction simultaneously.
Perhaps ahead of the slides, but just in case, is there an assumption on operational model of an "Endless Forge" in the end-result intent? Is this aimed at an OIB-type entity GOGO, or GOCO or COCO (contractors)?	The desired end result is a COCO service available to all government customers.
Thanks very much for the informative presentation. To paraphrase something you said early on ... It's not just MOSA for the sake of MOSA -- it's about integrating the network / ecosystem. With that in mind, will you please discuss the thought process regarding requirements for "modeling the enterprise" -- not just interfaces/plug-ins between "machines" ... but architecting the interactions/behaviors among entities in the ecosystem (sensors, shooters, C2 nodes, and even longer-term logistics/sustainment) to ensure interoperability/integration/visibility across the entire enterprise?	The exemplar features listed are relevant to Endless Forge. However, efforts will be prioritized based on feasible user studies and applications to generate iterative progress towards Manufacturing as a Service.

Dr. Benedict: Endless Forge is an awesome realization, vison, and vehicle to get the DIB where it needs to be. What is the transition strategy for Endless Forge outcomes? AFRL/IBAS vs AFLCMC investment horizons can be out of sync & SPOs buy products not manufacturing capacity outside their specific stovepipe/PE? Is there expected direct interplay with IPAACs?	We are heavily engaged with the IPAACs and are also in discussion with multiple SPO's. There will need to be a transition from the OSW/DAF high level investment to operational utilization. It is our belief that the Acquisition Transition Strategy empowers the PAE's to engage and support the new business model.
In the assumptions for this effort, should we assume "openness of new approaches" when it comes to airworthiness and qualification approaches on technologies being leveraged?	That's fair, yes. Endless Forge's philosophy embraces model-based acceptance and performance-based qualification.
Is the intent to hand industry component requirements, interfaces, and tests to allow multi-vendor production of components of systems for modernization and sustainment IAW MOSA principles and reference guides? It appears the goal is full-up systems. There are few companies that can do that, so I fear we'll end up with the same outcomes as usual - large prime integrators building big things using their approved suppliers.	Endless Forge is less about multi-vendor production to increase capacity and more about establishing a more agile production network to facilitate quick variant delivery.

An alternative, or complement to, modularity is the idea of design tools coupled with a tailored product family, so you could rapidly design a tailored UAV airframe manufactured as a single monolithic print, for example. Is this in the space of things you will consider?	An airframe is only a single subsystem. While it is important to have agility in that space, we are looking for broader system level focus which may require partnerships to provide the needed range of capabilities.
Can VAR's participate to help facilitate procurement of materials to be provided to service integrators?	Nothing in the design of the Endless Forge solicitation precludes value-added resellers from participating.
is there a recommended process for AI robotic software companies that integrate with machine tools to work with existing capabilities/vendors to help MaaS scale?	The Endless Forge team is purposely not being prescriptive on such an approach or process.
What requirements are you looking for a manufacturer to have in place? Such as CMMC L2/ DLA JCP/ ITAR reg in DDTC/ FFL?/ Quality certs- ISO or AS9100	All known requirements at this time have been outlined in the solicitation. Any additional certification requirements would be based on the specifics of the proposed solution.
Who will own the digital solutions under this solicitation for both AOI1 and AOI2?	As noted in paragraph 2.7.4 of the solicitation, AFRL is open to multiple options for data rights; offers should include their proposed data rights in their white paper.
Small shops often walk away from these contracts because one experimental failure could bankrupt them. Can we use the Endless Forge funding to set up a shared insurance pool (a 'captive') that protects these	AFRL is interested in any/all approaches that address the requirements in the solicitation. Companies should submit white papers outlining their proposed approach, to enable us to move into more substantive discussions with individual vendors.

sub-tier manufacturers from that liability?	
Is this effort more viewed as an op for R&D or more to hopefully pick something off the shelf and move forward.	AFRL is open to solutions that include R&D and/or relevant off-the-shelf capabilities.
With the timelines discussed, one of the key questions that comes to mind is how this MaaS network interact with government contracting/acquisitions?	AFRL is interested in white papers that address this dynamic within the context of the solicitation.
Can you confirm the white paper instructions found in the AFRL MAA Industry Guide are applicable to this submission? Specifically, are white papers bound to the 5-page limit suggested in Chapter 4?	Confirmed. See 5.0 of Amendment 1
are you open to redesign of legacy weapon systems to increase capabilities? If so, how is AFRL working to break down barriers to OEM IP and USAF engineering authorities?	Yes, as long as there's feasible gains in speed of system delivery. OEM IP should be considered in crafting the feasibility of plans.
If we have a digital thread capability (or agentic AI) and a manufacturing capability to rapidly produce that change but what we don't have insight into who the product design agents are that have the long lead component we can solve. If we don't have that link, can you help us	We are working with the DRIVE Consortium to support partnering/matchmaking; please visit that site to register your interest: https://driveconsortium.org/contact/.

identify/introduce us to those platforms and Tier1/Tier 2 suppliers?	
Do you have a framework, requirement, or guide on how you want to do essentially digital qual? If so, has that been vetted with the fielding constraint groups such as airworthiness, cyber, and SeekEagle? We would love to do this, but there are too many gatekeepers right now.	Endless Forge is focused on performance-based qualification and model-based acceptance. Ultimately, the program should deliver a digital-first risk management approach that facilitates expedited acceptance. Traditional acceptance authorities, such as airworthiness, should not be considered hard constraints.
Following up on the point that MaaS increases flexibility but does not directly address on production capacity. Have you looked at the possibility of adapting design in support of mobilizing latent commercial capability? E.g. JPAC has looked at how to leverage an automotive factory with latent capacity. Could modular and factorial design be	AFRL is interested in any/all approaches that address the requirements in the solicitation. Companies should submit white papers outlining their proposed approach, to enable us to move into more substantive discussions with individual vendors. Additionally, we will follow up with JPAC on this specific point.

leveraged to optimize a design with the goal of minimizing the facilitation required to hand-off work for contract-production by a less flexible manufacturing facility?	
Under AOI 2 - specifically High-Speed Affordable Weapons, would only full AUR weapon systems being considered or would other key sub-system be considered as well (SRMs, Seekers, Warheads etc). So would partnership be required with an AUR prime?	All available information on relevant platforms is included in the solicitation. For companies interested in partnering support, we are working with the DRIVE Consortium to support partnering/matchmaking; please visit that site to register your interest: https://driveconsortium.org/contact/.
As an electromechanical subassembly manufacturer, how would you suggest smaller specialized firms like ours could integrate into that regional production network? Would there be direct opportunities to act as standalone nodes, or would you envision partnerships with larger prime system integrators as the primary pathway?	AFRL has framed the requirements for EF in the solicitation. We are interested in responses that propose solutions to these requirements.
You mentioned regionalization as away to create for more agile supply chains, but also that EF is not interested new factory builds. How do you reconcile those two positions? Specifically, what mechanisms enable regionalization without investing in new manufacturing capacity?	AFRL has framed the objectives for EF in the solicitation. We are interested in responses that propose solutions to these requirements. There are no limitations on potential solutions beyond those outlined in the solicitation. If the objectives cannot be met in your judgement, please explain that in any response.

Is endless forge and DARPA TTO freedom's forge 2.0 collaborating? The goals are similar - Hyperspeed and hyperscale delivery of surge weapons.	The Endless Forge team is actively coordinating with offices across the DoW with similar interests, including DARPA, and we are collaborating with any relevant initiatives.
In the attachment 1, it is mentioned that "Where appropriate, AFRL is looking to introduce fresh industry entrants, early-stage manufacturers, or small businesses offering novel technologies, processes, or expertise that expand the program's innovation landscape." Can you elaborate on how fresh entrants can participate in a partnership viewed favorable by AFRL?	All interested parties should follow the process in the solicitation posted on sam.gov to submit your white paper. The Government reserves the right to award the instrument best suited to the nature of research proposed, to include Other Transactions

Is endless forge considering Maintenance and Sustainment capabilities to keep existing systems ready and operational?	No. The focus of Endless Forge is more on the reconfiguration of a new variant of an existing system.
Would there be interest in working with the Defense Microelectronics Activity to assess electronics modularity and tech refresh?	The EF team would be happy to work with any government offices who are interested in partnering on a collaborative solution. Interested offices should reach out to the EF PM whose info is included in the solicitation on sam.gov.
What is the maximum size (dimensions/weight) of weapon system AFRL is interested?	We have not established a maximum size. All available information on relevant weapon systems is included in the solicitation.
Are there opportunities for industry and FFRDC/university partners?	See 4.2 of the RX MAA - FA239424RB003
As an electromechanical subassembly manufacturer, how would you suggest smaller specialized firms like ours could integrate into that regional production network? Would there be direct opportunities to act as standalone nodes, or would you envision partnerships with larger prime system integrators as the primary pathway?	AFRL has framed the requirements for EF in the solicitation. We are interested in responses that propose solutions to these requirements. There are no limitations on potential solutions beyond those outlined in the solicitation.

Perhaps an list of examples of platforms that are experiencing long leads that we can review and pick what we would best impact?	All available information on relevant platforms is included in the solicitation.
Should we assume, that Additive Manufacturing can be leveraged for Endless Forges, given the state of debate within DoW Airworthiness community on the AM technologies?	AFRL is open to solutions that include AM technologies.
How about a highly accelerated, modernized, and digitalized conventional production process that can make weapons systems 10x faster at half the cost in established and conventionally used alloys? Will you support this activity?	AFRL is open to any and all approaches that address the requirements in the solicitation.
So maybe not doing as much environmental testing?	AFRL is open to any and all approaches that address the requirements in the solicitation.
Hi Mark. Will those slides be available to the attendees after the meeting?	Yes, slides will be posted to the sam.gov site where the solicitation was posted, along with the recording of the webinar and all Q&A.
Hi Mark & team. Would you like questions as we go, or at the end? Thanks!	You're welcome to submit questions as they come up. I will be moderating Q&A and will verbally tee up as many questions as possible during the webinar. All Q&A (including those we answer live and those we don't get to) will be answered and posted to sam.gov

Production lines are near or at capacity because we have been on a "death march to efficiency" in global supply chains over the past 3 decades. We got very good at it. The question is, who is going to pay for additional capacity?	AFRL is interested in innovative funding models, and is open to a range of ideas that may be proposed by offerors. That said, please refer to the solicitation regarding the specific requirements; EF is not focused on advance funding of additional surge capacity, but rather on Manufacturing-as-a-Service, an adaptive, surge-capable, resilient, and scalable manufacturing capability. It is believed that the efficiency of high utilization in a MaaS model of operation will encourage continued investment that supports elastic addition of capacity.
Can UARCs participate in this program?	AFRL is open to responses from UARCs; the only constraint, if any, would be on the UARC's side based on their existing contract terms.
What's your timeline from White paper to IOC and FOC for this program?	Slide 17 from the Industry Day presentation addresses the specific start/end times for AOI-2 demonstration events. For AOI-1, timelines should be specified in the white paper.
Will a recording or slides be made available?	Yes. The slides, recording, and Q&A will be posted to sam.gov ASAP after this webinar.
At RAPID + TCT, will you be available for questions	The solicitation on sam.gov has contact info for Major Justin Carl; please reach out to him to schedule any discussions with the Endless Forge team. For substantive technical discussions about your proposed approach, please submit a white paper through the process outlines in the solicitation posted on sam.gov.
How will AFRL take into account the joint ecosystem that already exists with the other services across the defense industrial base especially for munitions/missiles/hypersonics?	The EF team is actively coordinating with offices across the DoW with similar interests and we are collaborating with any relevant initiatives.

Can we get a list of attendees?	We are not able to release a list of attendees. However, we are working with the DRIVE Consortium to support partnering/matchmaking; please visit that site to register your interest: https://driveconsortium.org/contact/.
Mark mentioned that proposers should be open to iterative discussions on how to support endless forge. What's the best way to get in touch and start that discussion?	The solicitation on sam.gov has contact info for Major Justin Carl; please reach out to him to schedule any discussions with the Endless Forge team. For substantive technical discussions about your proposed approach, please submit a white paper through the process outlines in the solicitation posted on sam.gov.
If we aren't selected, would you be open to a CRADA to share information about the manufacturing network?	CRADAs are a mechanism that are available and frequently used by AFRL, and would be employed by the EF team as appropriate.
Do you anticipate working with or coordinating with the Civil Reserve Manufacturing Network Program?	The EF team is actively coordinating with offices across the DoW with similar interests and we are collaborating with any relevant initiatives. The CRMN Program is still being developed, but we are actively engaged with that team.
After the white paper is selected, is there a contract vehicle already established or would one need to be created? CSO, OTA, etc?	The solicitation on sam.gov is a Multiple Authority Announcement. The Government reserves the right to award the instrument best suited to the nature of research proposed
Will there be any type of partnering event?	We are working with the DRIVE Consortium to support partnering/matchmaking; please visit that site to register your interest: https://driveconsortium.org/contact/.

Will a matchmaking/profiling event or repository will be generated based on whitepapers?	We are working with the DRIVE Consortium to support partnering/matchmaking; please visit that site to register your interest: https://driveconsortium.org/contact/.
What's the direct link to the sam.gov solicitation?	https://sam.gov/workspace/contract/opp/0b0e993395c2486d80014e99b7b5070b/view After accessing the site, you must use the Version drop down in the top right to select the most recent date.
How can FFRDC's like ORNL get involved in Endless Forge?	See 4.2 of the RX MAA - FA239424RB003.
I apologize if this was answered earlier, but if weapons systems manufacturing is the main focus, have there been talks with the main primes who currently manufacture cross services, for example AIM-9X, "sharing" their designs to allow for more to be manufactured each year?	The EF team at AFRL is actively engaged in discussions with the Primes, and also welcomes solutions that include teaming with the Primes as appropriate.
Can other Government agencies participate in Endless Forge?	If another Government agency is interested in performing work, contact the Program Manager identified in the Solicitation. If those discussions result in a mutual interest to pursue your agency's participation, the effort will be pursued independent of that Solicitation.

Can you confirm if five (5) pages is the page limit for the white paper? [Reference: RX MAA Industry Guide, Chapter 4, 5.b.6]	Yes see 5.0 of Solicitation Amendment 1
Are you able to provide a white paper template in Word format?	No Template is available
Are Cost-Plus-Fixed-Fee (CPFF) contracts required? Would other contract types be allowed or considered?	The Air Force may award the instrument best suited to the nature of research proposed, such as any appropriate contract type under the FAR or OT for Prototype, grant, cooperative agreement, or OT for Research per "contract/instrument type" on page 2 of the solicitation.