

Vice Admiral Frank "Trey" Whitworth  
Director, National Geospatial-Intelligence Agency

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**Moderator:** Good morning everybody, and welcome to what's going to be a great Defense Writers Group. Our special guest this morning is Vice Admiral Frank "Trey" Whitworth. He's the Director of the National Geospatial-Intelligence Agency. Admiral, in honor of your predecessors, as in those who navigate by the sky, I'm wearing my celestial tie.

**VADM Whitworth:** I saw that. Impressive.

**Moderator:** If you get lost, you can find your way home.

The ground rules are as always, this is on the record. You can record for accuracy of quotes, but there's no rebroadcast of audio or video. I'll ask the first question. More than a dozen of you got in touch in advance to be on the list. We'll get through as many as we possibly can. Because of the interest, let's really stick to the rules -- a question and one follow-up. No more than that.

So Admiral, thank you for joining us today.

I want to ask about AI. To use the movie title, AI is everything everywhere all at once, and I'd love to hear your sense. Since NGA is the leader in the intelligence community in AI development, what is the future role of AI broadly across the intelligence community and what is NGA's role in AI in development as a combat support agency?

**VADM Whitworth:** Thanks, Thom. I appreciate this forum. This is a longstanding forum. It's my first opportunity to be here and I'm already honored to have the opportunity on behalf of the nearly 16,000 professionals of the National Geospatial-Intelligence Agency.

Your question, and I'm going to break it into two parts. First, NGA is the leader within the IC; and then we'll get to the specifics of being a leader in innovation and AI.

There are a good number of people at the table that I've already

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met with and we've had conversations, but there are some people I've never met before and so let me just baseline a little bit of NGA, the National Geospatial-Intelligence Agency and our leadership within the intelligence community. I would choose three words -- targeting, warning and safety. And I would identify also one principle which is distinction.

So you may have heard of the Laws of Armed Conflict which are the principles by which any combat support agency or any entity within DoD utterly lives by. Things like humanity, proportionality, necessity.

But then there's this issue of distinction. Guaranteeing to the best of our ability -- and we rarely guarantee but we try to be certain on the distinction between a combatant and a non-combatant; an enemy and a non-enemy. And that's hard.

I will tell you based on my 35-plus years of experience, especially in targeting, that's one of the hardest things we do in targeting, but it's also essential in warning. Because warning involves establishing a baseline that we see as we're responsible for the visual domain within the intelligence community. Establishing a baseline of behavior or objects and where they are and the specificity of their location and their characterization, and then sighting that there's an anomaly, that there's something new, something different that might be troubling. And sometimes putting the breadcrumbs together to actually tell a tale of a trend that is disconcerting and might need some sort of reaction. That's one.

Then there's safety, which is probably the least understood and maybe the least reported aspect of what NGA is responsible for. That also involves this element of distinction. Distinguishing objects, let's say for our aviators who fly our planes in and out of airfields, distinguishing objects that could actually bring them harm that are new, that encroach upon the airspace as they come into an airfield. Or that might be new as it relates to a newly discovered seamount on the seabed. Or that might be new relative to bathometrics and hydrography for people who are in ships.

These are things that keep people alive, and underscoring all of that is the need for precision and accuracy relative to where you are on the earth and understanding the earth, which gets to precision navigation and timing. A lot of people do not

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understand, or realize at least, that NGA actually founded what we consider the ultimate datum for precision and accuracy in mapping which is the WGS-84, it's the World Geodetic System 1984, and we're still responsible for that. This gets into an area of geodesy. We can talk about the talent imperative to keep up our role in geodesy as a nation, not just as an agency.

But underscoring all of these tenets of targeting, warning and safety is this issue of distinction and being certain, as best we can, in making assessments and keeping an archival record of our observations.

So this now is a good segue to okay, let's talk about now applying distinction which is so incredibly important, especially in targeting, but in all areas of warning and safety as well. And we'll make a little bit of news as to how we will be a leader for AI and especially application of models.

Just to review. Back up a little bit. We're talking about computer vision which we've been using for decades, to be quite honest, which does detections and then sometimes renders automatic findings and text. It's getting better and better. And now we're moving into, we can actually train through machine learning, we can train models, a series of algorithms, train models to do that while we might be asleep or while we're not looking at a particular image. This is the essence of human/machine interaction and teaming at NGA.

We'll talk a little bit about Maven as we get into it, but models are starting to emerge at quite a pace. People who are innovative want to apply models in all walks. In GEOINT, getting back to that issue of distinction, it is so important that we make sure these are good models because the issue of positive identification underlies effectively whether you're going to be correct and whether we might have some sort of apology on behalf of our nation or an alliance.

So we want to ensure that, what I'm about to say is very accurate, so I'm always going to be extemporaneous with you, but in this one I'm going to read because it's so important and I want to be very precise, especially about the aspect of a pilot here.

NGA is proud to announce the establishment of an accreditation pilot for GEOINT AI models for the entire National System for

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Geospatial-Intelligence, otherwise known as the NSG. The Accreditation of GEOINT AI Models, AGAIM for short, pronounced "A Game". Very memorable. Model accreditation pilot is the evaluation of the methodology and robustness of a program's model development and test procedures. The accreditation pilot will expand the responsible use of GEOINT AI models and posture NGA and the GEOINT enterprise to better support the warfighter and create new intelligence insights. Accreditation will provide a standardized evaluation framework, implements risk management, promotes a responsible AI culture, enhances AI trustworthiness, accelerates AI adoption and interoperability, and recognizes high quality AI while identifying areas for improvement. In line with DoD guidance on ethical AI, NGA has established and launched a GEOINT Responsible AI Training -- GRAIT for short -- for all coders and users of GEOINT AI.

We actually launched a pilot class in both April and May and the plan is for this to eventually be broadly available to anyone in the NSG -- I mentioned that's a National System for Geospatial-Intelligence -- coding or using GEOINT AI capabilities.

GRAIT is tailored to developer or user-specific challenges across the AI life cycle. And everyone taking the certification will be asked to sign a final pledge to develop or use AI responsibly.

That's enough on that, but that is frankly, so important that I just had to get it right and read my notes.

I hope that at least gets us started with a new development and some leadership in this pilot for AI model accreditation.

**Moderator:** Thank you for that, sir.

First question is Chris Gordon of Air and Space Forces Magazine.

**DWG:** Thank you, sir for doing this.

You briefly announced and mentioned in your remarks Wednesday at the JMMC and that's [inaudible]. So where are you? Unpack that a little bit on what progress you've made. What that's actually doing and how you're working with the military and the Space Force.

**VADM Whitworth:** Thank you. Joint Mission Management Center,

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JMMC, was an idea that we hatched about a year ago as we saw an evolving and enlarging constellation involving a lot more forces to include the United States Space Force, of course, and COCOMs, and the interagency in an area that we had been very comfortable -- so when you think about tasking, processing, exploitation, dissemination -- TPED -- this is all about mainly the T. We do T, we do tasking for a constellation, but when you're talking about something that's getting this big, and especially given the investment that DoD has made in this particular constellation, we knew that we needed to have a place for collaboration. It needed to exist.

JMMC has been hatched. We established Initial Operating Capability, IOC, at the end of May and we actually have people inside of NGA who do this as a matter of their day-to-day work. But now we have literally seats available for the COCOMs, combatant commands, the services, especially US Space Force, and they are there, and they're collaborating with us. And we did this in collaboration with the US Space Force. It will continue to evolve, it will continue to mature, but it is IOC, as we speak, and that's in preparation for some of the initial launches of this booming, enlarging constellation.

**DWG:** What does IOC mean? Can you define it?

**VADM Whitworth:** Initial Operating Capability.

**DWG:** Yeah, what does IOC mean in terms of how many people, what you're actually doing, searches, meetings, conversations, what is the actual impact?

**VADM Whitworth:** To me it means we literally have the NGA and interagency personnel already seated in a place doing this work with members of the United States Space Force collaborating already, and wired for an allied portion of this that I will not specify. But that actual wiring for an allied participation was actually part of what I considered IOC, and we're there.

**Moderator:** Julian Barnes, New York Times.

**DWG:** I want to use my follow up to follow up on Thom's question and then I'm just going to ask the question I was planning.

In terms of a pilot program for AI training, is this eventually to be outside of government too? I.e., would industry come in

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to get accredited? Or is this just meant for US government employees in the GEOINT?

**VADM Whitworth:** Let me first address just DoD, and then we'll go into your question which is about larger commercial.

For DoD, we've very exact when we say it's a pilot because we want this to be effectively a pathfinder for DoD and the larger IC and we want to be wholly integrated into what DoD has in store as these standards. But you've got to start somewhere. This is another reason why I read it. It was very exact with these terms because you've got to start somewhere. This is something that we feel strongly about, is that we can formulate and formulate and formulate but at some point you've just got to start a pathfinder, start a pilot.

As to whether commercial adopts this independently, that remains to be seen. I'm not going to say anything about whether we would mandate that sort of thing, however, if it's going to be on a DoD system or certainly a GEOINT system, being used for GEOINT levels of certainty, whether to confirm probable type of call, you know, we're going to expect of ourselves in the National Geospatial-Intelligence Agency and the NSG, we're going to expect to see that it's with an accredited model.

**DWG:** In the news this year we've had multiple reports of Russia developing their space nuke for taking out satellites, but a weapon that if used would take out a broad array of space architecture not just an individual satellite. How does one -- obviously one hopes they would never use that weapon, or never deploy that weapon, but in that scenario, how do you adjust? Where do you get your imagery? How would we continue to function in terms of the targeting and the prevision and all that in such a degraded environment? Obviously you can't go into specific plans, but what's the broad approach that NGA would make in such a scenario?

**VADM Whitworth:** I'm afraid that what you're asking is a hypothetical based on something that is, frankly --

**DWG:** I did a double --

**VADM Whitworth:** It's a sensitive topic that even the National Security Advisor does not entertain these questions, so I'm not going to even delve into a hypothetical about something that

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sensitive.

**DWG:** Let me try one rephrase. We live in an era of more contested space. Broadly, how does an agency like yours prepare for an era of where space is a battlespace?

**VADM Whitworth:** I see where you're going, and I want to actually address the issue of redundancy and resiliency, but not necessarily specifically to things in space. Don't forget, we're about the ground game. Your question might be better for the NRO if you're talking about space connectivity or something like that.

The ground piece for us is what we monitor every single day. I have an Ops and Intel Update at 0845 every single day and we begin with a discussion on how is the ground architecture doing? Are we green? Are the ones and zeros moving across the center [inaudible]? And we move more ones and zeros than any other agency. When you think about the size of our files, that makes sense. The density of an image is a significant amount of data. So when you're moving that much data you've got to know if you're green. And we make no assumptions about the possibility of what if it's not? What do we do then? We're always working on better resiliency and redundancy. It's one of the reasons that we have our people in so many different places. We want to assure we have personnel redundancies and resiliency on our systems.

We've been working on something called the Joint Regional Edge Note that is dedicated to fighting or at least operating while you're a bit hurt. Okay? So Joint Regional Edge Notes allow instead of a spokes of the wheel where if you take out the hub all of the spokes go down, it's a mesh of meshes. Right? So we have mesh networks all over under this construct of the Joint Regional Edge Note. That's dedicated to resiliency and redundancy, at least for our ground picture. I will defer things in space to the NRO.

**Moderator:** Demetri Sevastopulo, Financial Times.

**DWG:** Good morning.

I'm curious, DoD has said that there's no carriers in the Pacific the moment. They've had to move off with stuff going on in the Middle East and elsewhere. Have you had to reallocate

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assets in a way that you don't have as much in the Indo-Pacific region than you would like?

**VADM Whitworth:** Everything's a balance when it comes to our personnel or expertise, our systems, et cetera. When you're talking about the pacing challenge of China and the acute threat of Russia, we're very careful in not taking risks in those areas. So while I'm not going to address the exact dimensions of what we've taken from and moved to to rise up to the current occasion to be ready for warning and even to be ready from a targeting perspective, I don't take risk when it comes to the pacing challenge or the acute threat.

**DWG:** To follow up, every year in the DoD China Report it's never the top line, but the amount of assets that China are putting in space, the pace that they're doing things is amazing. Are they now at a point where they have the same kind of global capabilities or range that the US has for the [inaudible]?

**VADM Whitworth:** I live this question because it's a net assessment question and I think net assessment's one of the hardest things that we do. And it's not just an intelligence question. This is an Ops/Intel team question. Which means that I would need to involve a lot more of the whole of government in giving you an authoritative answer.

But here's how I do tend to answer this question. We have to be humble and respect some of the advances that the Chinese have made in terms of their coverage. But there are still some questions that we know for ourselves what we're capable of based on two decades of a very, very fast-paced War on Terror, and terrorist entities and it's about speed, flatness, and in some cases resiliency, and also the movement of negative information, bad news, quickly up the chain. This is one area that we're extremely good at, and this is where --

**DWG:** Filtering you mean?

**VADM Whitworth:** No filtering. In fact if there's a bad news story occurring somewhere, a force protection issue, something that the President must know, the watch network of the United States, both the intelligence community and the DoD, is literally organized around the principle of speed to get that information up. This is a question that I would have to gap, frankly, is how are the Chinese at that? Because that's where



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you bring in the fog and the friction of combat and readiness for combat. I think that's an open question to your question when you're talking about net assessment and readiness.

**Moderator:** Next is Brandy Vincent, Defense Scoop.

**DWG:** Thanks so much for doing this.

To start, really quick on the credentialing pilot that you announced, is this specifically for GEO AI and advanced models and algorithms? And can you just talk about sort of exactly what you would do with [inaudible].

**VADM Whitworth:** I am only the functional manager for Geospatial-Intelligence, so what I've just read is about Geospatial-Intelligence AI.

**DWG:** -- generative specifically.

**VADM Whitworth:** In our own way. There are a whole lot of different types of models and everyone likes to talk about LLMs. This is more of the LVM. I'm going to make that term up, kind of a large visual model or a visual transformer I think is actually the better way of talking about this.

So we're talking about models for computer vision and that form of generative AI.

**DWG:** And then I really enjoyed the panel yesterday and getting that full scope sort of look at Maven. But something I've been thinking about, does NGA actually have the infrastructure, human, physical, digital, to accomplish all that you need to do in the future fight?

**VADM Whitworth:** I am confident in our team. I cited two areas where I'm going to really work hard on our resourcing and those are computer and manpower, personnel power. So I'll explain since not everybody was at the meeting yesterday.

I think it was very smart for the Under Secretary of Defense for Intelligence and Security to move what was then Project Maven into a place like NGA to become Program Maven, and it is now a program of record because go for that which is hardest first. And when you're talking about computer vision and you're talking about all that data, you have to have at least the

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infrastructure to support the weight of it. That's why I think they said this makes sense to actually put it at NGA.

Now the good news is, and we just talked about JRIN and some of the things on redundancies and how big that network is for our ground game for moving those ones and zeros. The answer is yes, but not necessarily for compute. And this is an area that I addressed yesterday.

We are growing the number of models I'm not going to say exponentially, but significantly. I'm not going to say the number of models but it's significant. I'm really impressed by the team's ability to generate new models in the last year. And the number of detections is going up precipitously per day. I think Americans would be really happy to hear this. I'm not going to go into those details. I don't think we need to show those metrics. But the issue is that you've got a set amount of compute and we're still stuck in kind of 2016, 2017. So when you throw that amount of detection and that amount of inferencing at the same amount of compute that you had before, it starts to slow down and that's a problem.

So this is something that we are addressing with my change of command and I'm very confident that we'll fix that.

The other piece gets into more of the human dimension. It takes humans, number one, to train the model. And I know that there are going to be people out there who say models will start training themselves. Okay, that might be a theory of kind of perfect artificial intelligence, but let's not forget there's some very clever adversaries out there that will confound some of the training data and confound some of these model solutions. And I trust right now the 10, 20, 30, 40 year veteran to recognize that very quickly and to ensure that we recalibrate the model accordingly if we start seeing that sort of thing.

So part of the process that we have right now is to archive our observations called structured observations into a format that is always findable, archivable, indexable, searchable, et cetera, to put the pieces of the breadcrumbs together. That's a process that takes everyone's time. Right?

Now if I introduce, I also want you to train the model and to do something called data labeling. It's a little different. It's not exactly the same as structured observations. It's now

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you're doing data labeling in a way that the machine understands in order to learn. That's an additional tax on their time.

So with the same number of eyes, with the outcome being don't lose any step relative to targeting, warning or safety, do your structured observations, but I want you to carve out some time to train the machine. I submit that is another thing -- you know, from a resourcing perspective we're going to need to address.

**Moderator:** Courtney Kube, NBC.

**DWG:** Can you give us an accessible example of how on maybe even a day-to-day basis NGA would support something like what's happening in Gaza, or support -- I know you can't talk about a lot of specifics, but can you just explain it like in an accessible way?

**VADM Whitworth:** Yes. We are enabling our government to ensure that we are living up to the President's mandate to allow Israel to protect itself. Right off the bat.

We also have a responsibility to tell the whole story. And I'm very proud of the agency in this regard, that we certainly are enabling Israel to protect itself, but we are also calling every ball and strike and balk and foul and we're doing so in a very complete way that is not biased or shaped. It's just truthful based on our observations, and we're doing it in a way that our consumers can learn and may actually adjust some of the conversations they're having with other nations.

So every single day we review how are we doing in this regard, and we review our products and we make sure they're on time. And these take -- when you're talking about following let's say the amount of damage. If it's the amount of damage or the level of crops and their damage or something that affects the infrastructure on a place on the earth, that takes a lot of people to keep continuity from week to week to week.

I'll share with you that there was one product that beginning when we mandated this of ourselves to tell the entire story, it took about 600 personnel hours to do that particular product. Through good computer vision and just good tradecraft of databasing and the archiving that we've been talking about, we've gotten it down to about 200 personnel hours.

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I know I'm not giving you a lot of detail here, but I hope it's at least showing you how seriously and day-to-day this process is.

**DWG:** When you talk about calling out fouls, is that your way of saying that you're identifying when there's something like war crimes that they've committed in Gaza or --

**VADM Whitworth:** I wouldn't use a term quite that specific. I just would offer that when you've got a certain amount of time and people and you need to enable the defense of Israel you make observations and you don't stop just because it might help them. You tell the entire story. Right? So we're observing everything and making sure that we're not shaping those stories. This is part of the intelligence creed, it's like no shaping.

**Moderator:** Tara Copp, AP.

**DWG:** Thanks for doing this.

Could you talk a bit more about the agency's role in supporting Ukraine and its ongoing operations there? Is it just commercial satellite imagery that you're assisting with? Is it actually existing the government of Ukraine?

**VADM Whitworth:** Our responsibility is to ensure that Ukraine can defend itself. It's very similar to the question on Israel. We want to ensure that Israel can defend themselves. We want to ensure that Ukraine can defend itself as well.

I'm glad you asked this question because I think there as one outlet yesterday that twisted an answer that Julian asked yesterday. We make commercial imagery available so that Ukraine can defend themselves. As to whether that's involved in -- I have no idea whether it's involved in the whole Kursk thing. And as David Cohen, the Deputy Director of CIA said yesterday, that was a surprise. So I can't address your question from an area of knowledge. I have no idea whether commercial imagery helped inform them on that particular limiting campaign.

**DWG:** How do you [inaudible] access to the commercial imagery? Are you further scrubbing it to things that you think are --

**VADM Whitworth:** No. No. And that's an important point. There

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have been some myths put out there that there's some interlocutor as to what goes into our portal known as GEGD. GEGD is a portal that we founded with one of our key vendors that is a portal so that -- there are about 400,000 users who are vetted. Vetted users. Can get access in near real time, as quickly as possible to commercial imagery. There is no interlocutor who says thou shalt go and go to the portal or thou shalt not. We don't do that. It is a throughfare.

**DWG:** GEGD stands for?

**VADM Whitworth:** Help me out.

**Voice:** Global Enhanced Delivery System. [Corrected later - Global Enhanced GEOINT Delivery.]

**VADM Whitworth:** There you go.

**DWG:** And that's not just [inaudible].

**VADM Whitworth:** Well it's been part of I think the enablement of the Ukrainians from the beginning. This is something we addressed very early, is that they would need some sort of a portal and access to commercial imagery.

**DWG:** One more. Could you talk a little bit about the agency's efforts to expand access beyond Five Eyes and partners to Geospatial-Intelligence? And where the pressure points still are there?

**VADM Whitworth:** In addition to being the functional manager for GEOINT within our national system, the NSG as I mentioned, we have an ASG, the Allied System for Geospatial-Intelligence. That comprises many different governments that are dedicated to the same principles and ideals of democracy and our values.

It's very good. In fact I would submit that because of a well-run secretariat and a well-run kind of battle rhythm and the nature of GEOINT being something that's relatively easy to discuss. And when you think about all the INTs, whether it's SIGINT, HUMINT, and then GEOINT, GEOINT is actually easier to talk about. And it tends to break down some barriers of releasability and it tends to like start a conversation.

So sometimes you get relationships based on sharing between

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countries that began with GEOINT and then actually become more formalized in the other INTs. It just kind of starts the ball rolling.

**Moderator:** Thanks. Warren Strobel, Wall Street Journal.

**DWG:** Thanks for doing this.

I have a follow-up to Julian's earlier question about the Russian purported nuclear anti-satellite. That's a hypothetical threat but there are a lot of real threats that are already [inaudible] Russia, and that's [inaudible] and Chinese [inaudible] satellites. I think it's been reported that some Russian satellites have [inaudible] orbit near ours.

My question to you is, are adversaries already messing with your ability on orbit to gather pixels for those gathering threats in [inaudible]?

**VADM Whitworth:** I'm not going to address whether it has already occurred because I don't think that's necessary. But I will address that we changed our motto to include from seabed to space to say the word space to ensure that Americans know that we don't just look down at the rock. We look up. And while we don't talk very much about how, we do have a responsibility to discern good behavior from bad behavior.

And this is the essence of the relationship that we have with US SPACECOM, and frankly, the NRO, and what has actually been formalized into a [tri-seal] protection framework that I think I announced at a GEOINT one or two ago. It's the real deal. It exists. To ensure that we move with a breakneck pace when we see something that is troubling up there.

**DWG:** And a follow-up on the Joint Mission Management Center. I'm trying to sort of imagine in my head how this works. Two questions, are people in that center, are they working on real satellite tasking or is it more of a simulation and [inaudible] thing? The second question, there are so many players who want data [for free]. Competing priorities. I'm sure most of them can be worked out with a conversation and a handshake but at the end of the day who has the final say is the Secretary of Defense, the SecDef in ODNI?

**VADM Whitworth:** I want to address the second question first

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because I'm not clear on what kind of data you're talking about.

**DWG:** If there's a disagreement over tasking satellite priorities. That sort of thing. Again, most of this is probably worked out in conversations, but at the end of the day somebody might have to make the call. Who makes that call?

**VADM Whitworth:** That's still being actually worked out. I'm really confident that we have done in a very good kind of eureka moment in our understanding of US Space force and their understanding of us. It's going very well. I think the JMMC is part of that.

And I think your question gets to prioritization because that's typically where the rubber meets the road. Like how are we going to prioritize? There's a certain amount of time, there's a certain amount of sensors, what's going to go first, what's going to go last? What falls below the cut line, et cetera? That is exactly the type of conversation and process that will be integrated into the JMMC.

In answer to your first question, JMMC is doing real work on real satellites. I'm not saying it's necessarily what's considered a kind of new constellation that's going to grow exponentially. That's too strong. It's not exponentially, but it's going to grow significantly between now and 2032. But it's ready to.

Again, this is sort of like the pilot we discussed relative to model accreditation. You've got to start somewhere. You've got to have a sand pit where people get together and actually look each other in the eye, talk about things like allocation, prioritization, cut lines, et cetera. And we're really happy that people are starting to come into the sand pit.

**Moderator:** Audrey Decker, Defense One.

**DWG:** Thanks for doing this.

I was wondering if you could give a quick overview of where you guys are with Project Maven, and like how actually they've been using it in the field, if you can give us any concrete example.

**VADM Whitworth:** The most important metric here is, it's no longer a project, it's a program. I mentioned yesterday that

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when I was briefed for the first time by some of the really creative people who had been working on Project Maven, when I was briefed the first time as the Director of NGA, I asked hard questions mainly about stewardship and return on investment because I knew that ultimately if we're going to be a program of record we needed to have sound principles in this regard. That's why I'm very proud to say we are now considering NGA Maven a program of record, and it's even gone through the additional review of the Joint Requirements Oversight Council.

So now you're talking about a real program that has all the enablers that we bring as a big agency coupled with what the COCOMs and the services and industry bring. All with key standards. The enablers that we bring are things like servers. Big, big services in the management of data. Big networks. Across domain solutions. A lot of people don't realize how important a cross-domain solution is when you talk about multiple levels of security.

I've got one person that has been coding cross-domain solutions and I just implore this person to use crosswalks because it's so important to our national security and to Maven's efficacy.

We don't specify that much about the field because, I'd like to actually just say US EUCOM, US CENTCOM, US INDOPACOM, they're using it.

I talk a lot about exercises and how it's being used in exercises, but I stop short of actually specifying very specific places on the earth for operations where it's being used. I think enough is being talked about without my validating it.

**DWG:** I know NRO has their own processing [inaudible] program. How do they compare?

**VADM Whitworth:** I'm not sure what you're referring to. You might be talking about automatic target recognition, and if that's the case, part of why we want this pilot for model accreditation is to make sure everyone has the same standards relative to this issue of distinction especially, and accuracy, precision, et cetera. Location aware. All of that.

So I don't know if that's what you're referring to. Maven has more than just automatic target recognition. Maven, and this is what yesterday's forum was all about, is how the code is so



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agile within Maven Smart System, which is kind of the graphical user interface of NGA Maven. We're kind of the overall engine for the thing, but the GUI itself is very agile so that you find that the workflows that maybe affect logistics and certainly operations, battlespace management, those things are being integrated into the GUI and that's really the power of ops and intel integration that we're seeing just through this one program.

**Moderator:** We're within 20 minutes. We have six questioners on the list, we'll get to as many as we can.

Next is Frank Wolf of Defense Daily.

**DWG:** Back in May the House Armed Services Committee, the Strategic Forces Panel, had said there was some concern among the COCOMs in terms of timeliness of tactical or commercial imagery, commercial products being provided, and they wanted sort of a list from the COCOMs, the number of requests made these past two years, and whether they have accomplished those tactical timelines. Can you give us some idea of what you're finding? You had talked about this previously, that you had disagreed with some of the conclusions from others that it wasn't meeting tactical timelines. But can you put some meat on the bones?

**VADM Whitworth:** On commercial?

**DWG:** Commercial, right.

**VADM Whitworth:** I thought that was a bit unfair and unfounded. This is why this question GEGD was so important because the question is, is there an interlocutor that slows it down? Right? And there's not. If an image exists in the commercial space and it's part of GEGD, the user gets it at the same exact time that NGA gets it. I think that's really important and it busts a myth that there's this arbiter in the middle.

As to COCOM support, with nearly 16,000 people and 25 percent are not in Springfield and the Washington, DC area, or not in St. Louis, 25 percent. That means the majority of them are at the COCOMs and the services and some at the pointy end of the spear, getting the job done and representing what those COCOMs or those entities, those JTFs, et cetera, what they need.

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Our day is really predicated on what can we get for the COCOMs, what can we get for the Chairman, for the Secretary, oh yes, and of course the rest of cabinet level readership, and of course the rest of the DNI and the rest of the IC. But there's so much overlap, frankly, in there that I think there was some fact finding to see if there was anything to some of these myths that we're slow in the way that we're delivering commercial imagery. And I'll defer to some of the people who did that fact finding. But what I'm reading right now is they were busting the myth as well with the feedback coming from the COCOMs.

My inbox would be full of emails if we were failing in this regard, and it is not. I do not get negative reports from the COCOMs on our timeliness.

**DWG:** Where did the report, because you would imagine at least from the Strategic Forces subcommittee that they were saying these reports were coming from the COCOMs. So where is the disconnect?

**VADM Whitworth:** Whether it's the Under Secretary of Defense for Intelligence and Security, some of the fact finding that they might be able to do, or the DNI or the National Space Council, they would probably be better to answer the questions on some of their own fact finding. Don't take it from me.

My best feedback is in my daily interactions with those COCOMs, and I just don't have that sort of feedback, the negative feedback.

**DWG:** Quickly, can you give us an update on the Luno contracts where those are? It's \$490 million total versus the \$60 million earlier for the earlier contract for the economic indicator monitoring. What are you hoping in terms of, is that going to give you a better picture, for example, of countries' manufacturing output? What is going to be the best indicators [inaudible] and why is it so much more than the original?

**VADM Whitworth:** Luno is starting to now get at real maritime domain awareness in some cases, and I would say the large nature of coverage and scale when it comes to analytics.

So this is something that I'm really happy is responsive to, and a US INDOPACOM Commander's request for what are we going to do to enhance maritime domain awareness especially for some of

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those nations that need it? Especially with regard to unregulated fishing, the draining of proteins from the oceans that we see from -- the leader of this is unfortunately, the Chinese. How do we get ahead of this and allow others to get ahead of this and show the analytics of where this is occurring? Luno A and B is one of the measures that we're employing for commercial analytics to help in this regard.

**Moderator:** Josh Keating, Vox. I don't know if he's here.

Theresa Hitchens, Breaking Defense.

**DWG:** I kind of want to follow up on [inaudible]'s question but more [inaudible] with regard to GMTI, the Ground Moving Target Indicator program. [Inaudible] yesterday that it has passed its milestone B which means it's [going], it's got a baseline now, it's going to go into production. The tasking question was one that has been on the table along with the commercial thing. Is that now resolved? Or is that still being worked out?

**VADM Whitworth:** I think the answer to that is it's being worked out but I'm seeing a lot of progress and each side understanding each other, and ultimately, that would be a decision for the DNI and the Secretary of Defense. We're really confident in what we bring to the table and our expertise and what we've been doing with MTI over decades, but we're also really confident in our relationship with US Space Force and the whole of government approach that we've got going here and the collaboration that's occurring as demonstrated by the GMMC. And I think that's going to be the basis of kind of the answer to your question is the collaboration, especially when it comes to tasking.

**DWG:** And that's what [JMCT] is working on that issue as part of its portfolio.

**VADM Whitworth:** That's right.

**Moderator:** Sean Naylor, Alex Horton, Sandra Irwin, let's try to get through these.

**DWG:** Down at SOF Week a couple of months ago I picked up sort of persistent rumors that JIATF-NCR is going to be shut down. Are you hearing that? Is that so? And if it happened, what would the [inaudible] and the Defense Department lose?

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**VADM Whitworth:** I'm not hearing that, and I'm not in a position to even hear that kind of rumor. There may have been a time where I was, but -- [Laughter]. I'm just not in a good position to even address if I've heard a rumor like that.

**DWG:** Okay. We're a couple of months away from a presidential election in which one of the major party candidates has consistently criticized the intelligence community and he and his surrogates have also persistently criticized the civil service. You've talked about your 16,000 almost personnel. Many of those would be civil servants. How are you and your fellow leaders in the intelligence community preparing, if at all, both your agencies and your people, for the possibility that you might be serving under a president with a demonstrated hostility towards the intelligence community and the civil service?

**VADM Whitworth:** We prepare only for one thing, and that is the readiness of the United States. The hypothetical you're citing gets into a domestic political scene that we just stay far apart from.

Our people are so motivated and our morale is so high just by our mission, that we don't become encumbered with any sort of domestic issues like that.

I know this because we just had an evaluation, it's kind of a climate thing. It's called an employee engagement survey. And we're about three times the engagement survey result of the commercial sector, just showing that people care about what they do. And I think if they had something that was encumbering that feeling of engagement we would have had a negative dip, but we did not. We stayed right at a very high level of engagement.

**Moderator:** I'm going to use the power of the chair because I really want both Alex and Sandra to get questions in. We normally don't bundle, but I'll ask you both to ask your questions and that will save five minutes at the end for you, Admiral. First Alex of the Washington Post, and then Sandra.

**DWG:** Thanks for doing this.

Hopefully you saw the transcript last week with the [inaudible] Chief, Chris Maier. He had mentioned that there's [Aberzarians] who are interested in what Hamas is doing with digging

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underground, so how do you do your job in that sort of environment, those sort of [inaudible] where [inaudible]?

**DWG:** I had a question about the pilot program for the implementation of GEOINT model. You said at the beginning that you're going to be looking at the responsible use of GEOINT AI models. Is there a definition for responsible use? Can you maybe explain what you consider responsible use?

**VADM Whitworth:** Undergrounds. I'm not going to address undergrounds relative to Gaza specifically, but I'm just going to tell you that undergrounds are --

**DWG:** How you as an agency prepare for this idea that more people are looking at what they're doing as like a good model for them to replicate in their own country.

**VADM Whitworth:** I'm afraid that may not be necessarily new. So undergrounds are hard, but we have really good people who don't let anything escape them. I'm not going to go into the tradecraft of finding undergrounds, but I will say I am always entertained by our ability to be clever and to find things that are otherwise supposed to be concealed.

I think that's probably the best I can do on that. I'm not going to give away any tradecraft here.

For Sandra, responsible AI. This is nested into guidance that we've received all the way up to the Executive Order of the President and we're very comfortable in our being nested in DoD guidance as well.

The idea here, just to simplify it, is to ensure that anyone who touches our code, addresses GEOINT AI, understands that we're staying principled. That the code is staying principled, outcomes are staying principled, and the responsible application of distinction. Just like I discussed. The Laws of Armed Conflict, necessity, proportionality, humanity and distinction. The one that we invest the most in as just our tradecraft is that thing of distinction. So we want to make sure that no one fears that there's going to be some sort of singularity where a code takes over and makes decisions.

This is very much a team between humans and machines where humans are teaching that entry level analyst known as a model on

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a regular basis, constantly refining, evaluating itself, and we just want to make sure that we have a baseline for saying this model is as good as AGAIM and then perhaps the first level, the second level, the third level, the fourth, predicated on levels of maturity. So you pass one, you're ready for the second. Level of maturity there, pass that, go to the next. We're not addressing autonomy necessarily, we're addressing just the quality of the model.

**DWG:** And the scoring is going to be done by your agency? Or who's going to be doing all that scoring?

**VADM Whitworth:** We're going to set the standards, and then because it's pilot we're going to get into details like that with the people I call, ma'am and sir.

**Moderator:** Thanks.

Before I give you the final word, Admiral, I want to thank everybody for coming. A great set of questions. I'm stupid on this stuff, I learned a lot, but most importantly, thanks to you and your staff. I know that the intelligence community sometimes has a Heisman relationship with the press, and you're being here today I think explaining this to the American people through these reporters is a real benefit. So I thank you, sir, and the final comments yours.

**VADM Whitworth:** While we're still on the record, we haven't talked quite enough about our people and we haven't talked about something that's exciting in St. Louis.

I did want to address, we have a dearth of geodesists in this country, so when you're talking about how the earth is changing, the topography, the spin rate, that affects things like gravity which affect precision to include the precision of munitions. And the precision of our maps and everything. So we're working really hard to get more interest in geodesy and finding really good relationships with the academic world in this regard.

A great example, I think, is St. Louis where we've got this new building we're all going to move into in a year. 3500 of our people are in St. Louis. So 3500 people will move into this -- about, a little shy. And it became a catalyst for an ecosystem involving academia and that local government and industry with something called the Taylor Geospatial Institute which are

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scholarships for people, youngsters especially, if they say hey, I see a lot of people going into my neighborhood -- this is in the northern portion of St Louis -- what is going on in there? Is that something that's important? Is that something I can do? The answer is yes. There are scholarships, if you apply yourself there are scholarships, and we're really encouraging advancements in people dedicated to geodesy.

But we've also taken some bold steps with like high school internships, and so that exists out there. If you're inclined to write about people, I do hope that you engender this interest in something so fascinating and important.

We have the ability to relate to defense, defending and possibly breaking things, but we also, our people can relate to saving things. So there are AI applications, what I would call like fire and ice. The application to ice and the ice center and understanding we use AI actually to understand how ice pieces are breaking up in the north, especially. So that's an AI application that helps save things, especially in the safety and navigation. And we envision, as we have some automatic approaches with the National Fire Center, we envision AI having a role there as well when you're talking about the prevention of what might be a very preventable wildfire. This is something that I know industry has a great interest in as well.

So I hope that's a theme that maybe somebody would write about, because we want the best and we know that this is a great place to work.

Here we go. We plan to launch the largest data labeling request for proposal in the US government in September with an expected ceiling in excess of \$700 million. This represents a significant investment in computer vision, machine learning and AI. NGA will engage with commercial counterparts to navigate the challenges posed by increasing levels of GEOINT data. Together we will ensure delivery of timely, relevant and AI-enabled GEOINT to our customers, partners and allies.

So it's really about the amount, of course. That's a big number.

**DWG:** What is this?

**VADM Whitworth:** Data labeling is the process where the human

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actually identifies the object, and then in a way that is understandable by the model informs the model. So you have to actually label it in a very specific way. It's part of AI but it's really the essence of ML for computer vision.

**DWG:** Is it that computers will learn to label data from this effort?

**VADM Whitworth:** No, it's so that you can run the inferences. So as the image comes in, the labeling has already started the process of the algorithm in the model development and then the model is there, the new image comes in and that data goes through the model and then detections happen and characterizations happen.

**DWG:** So it's like saying this is a piece of the motorcycle. [Inaudible], I am not a robot.

**DWG:** Do humans do the initial label? Like this is a piece of a motorcycle, and --

**VADM Whitworth:** Yes.

**Moderator:** Robbin will be available to answer follow-up questions?

**Voice:** Yes. And one correction. Global Enhanced GEOINT Delivery.

**VADM Whitworth:** I never get it right.

**Moderator:** Everybody have a wonderful weekend. Admiral, great, great discussion. Great set of questions. And again, Robin's been awesome and she can answer follow-ups on the announcement today.

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