

Transcript

Press Conference to Discuss SILENTBARKER/NROL-107 Mission with Dr. Chris Scolese, Director National Reconnaissance Office; Lieutenant General Michael Guetlein, Commander Space Systems Command, U.S. Space Force; and Mr. Tory Bruno, President and CEO of United Launch Alliance

Aug. 28, 2023

Dr. Chris Scolese was sworn in as the Director of the National Reconnaissance Office in 2019. He's the 19th director of NRO and the first to be presidentially appointed and Senate-confirmed. Dr. Scolese provides direction, guidance, and supervision on matters pertaining to the NRO, and executes other authorities specifically delegated by the Secretary of Defense and the Director of National Intelligence. Before his time at the NRO, he had a distinguished career with NASA.

Lieutenant General Michael Guetlein is the commander of the U.S Space Force's Space Systems Command, where he's responsible for approximately 15,000 employees nationwide and an annual budget of \$11 billion. He manages research, design, development, acquisition, launch, and sustainment of satellites and their associated command and control systems across more than 20 geographically dispersed units. He has a distinguished military career of more than three decades including serving as our deputy director at NRO from 2019 to 2021.

Mr. Tory Bruno is the president and CEO of United Launch Alliance (ULA). Under his leadership, ULA has transformed into a competitive powerhouse that is shaping the future of space launch by making it more affordable, accessible and introducing revolutionary new capabilities to meet the challenges of the future. Over the past 35 years, Tory has developed and fielded dozens of critical defense and space launch systems that form the backbone of America's national security and the nation's efforts in space exploration.

DR. CHRIS SCOLESE: Thank you, Andrea, and good morning, everybody. It's always great to be here on the day before a launch — it's even better on the day of the launch. And it's great to be here with two fantastic colleagues, General Guetlein and Tory Bruno. We've worked together for many, many years across a number of different missions at the NRO. You know, we work to provide the nation and the world's best intelligence, surveillance, and reconnaissance capabilities from space and this upcoming launch, NROL 107 SILENTBARKER, is a continuation of that. And it's even more because it indicates an extremely close partnership with our colleagues in the Space Force. Working together, we've developed a system in a relatively short amount of time that's going to provide us with unprecedented coverage of what's going on in the in the geo belt so that we can understand the intentions of other countries to see what they're doing in the geo belt to see if there's any indications of threats or if it's just normal operations. That capability will just allow us to have, you know, increased understanding of what's going on there. So we look forward very much to the launch that's coming up tomorrow, and now I'll turn it over to General Guetlein.

LT. GEN. MICHAEL GUETLEIN: Thanks, sir. I appreciate it. Good morning, everybody. Tomorrow actually is going to be a very historic day. If you look at 2019, we stood up the United States Space Force because space was becoming not only congested, but worse yet, contested. And one of the ways that we're getting after space in this contested environment is through partnerships. Our partnership with our external stakeholders is absolutely critical to our success, and most importantly, our number one partner is the NRO, so this is a commitment to our partnership between the Title 10 and the Title 50 stakeholders. And the capability that we're going to launch tomorrow goes a long way towards giving us the competitive endurance, competitive advantage in space to make sure we can not only maintain, not only see, but maintain custody of the threats in geo. It has been a very strong partnership with the NRO getting this capability together and we look forward to the launch tomorrow. Tory.

TORY BRUNO: Thank you. Well, before I start I have to say that the bios don't do this justice. These two gentlemen are absolutely amazing leaders. I've known them for a long time – you could not have a better partner in any kind of important national security space mission. This is an important area for us. For me personally, I care a great deal about what we do and I'm just honored to be up here with you guys. The launch is going to be cool.

This is our bruiser configuration of the Atlas. That means it's got five solid rocket motors on it. When you hear “4 – 3 – 2 - 1 ignition,” do not blink because it will leap off the pad. We'll be pulling more than a G before we clear the top of that tower. About a minute and a half in, we're going to have fully expended half a million pounds of the solid propellant. We're going to drop those solids off. At three and a half minutes we'll have crossed the carbon line with the first stage and be all the way into space.

We'll let go of the payload fairing at that point and a minute later we will actually be entering the Low Earth Orbit (LEO) regime on the booster at over 20,000 miles per hour. We'll hand it off to the Centaur – it will conduct a whole series of very complex orbital maneuvers to put this payload directly injected into a high energy orbit. My rocket scientists love this mission because it is what Atlas was designed to do and no other rocket does it better. And personally, this mission means a lot to me as it does to everyone on your teams, I'm sure. There are folks out there working very hard every day to make earth orbit a rough neighborhood and this is going to do a lot to keep it the safe high ground, peaceful high ground that it is meant to be. And so I thank you for entrusting this to us. We will not let you down. Thank you.

Q: Maybe this is for Chris. I mean can you give us any more -- I'm not talking about details about SILENTBARKER -- but maybe a more general picture of what the spacecraft does besides what's in the press handout? It's hard, I mean I don't know what space domain awareness is to the average person on the street, so I mean just some general terms on that, I'd appreciate it, thanks.

DR. SCOLESE: So the idea of the mission is to put a satellite in geosynchronous orbit and then to be looking at that orbital regime and get a sense of what's happening day to day...And satellites do move in geosynchronous orbit. You've heard about communication satellites moving from one location to another to provide better coverage for other areas.

Certainly we want to be able to see that so we know what is going on in that area, but we also want to know if there is something going on that is unexpected or shouldn't be going on that could potentially represent a threat to a high value asset – either ours or one of our allies'.

So that's the purpose of it – it's really to be a watchdog in in that orbital regime, in the geosynchronous orbit. And when you think about it, geosynchronous orbit is about 24,000 miles, [or] 40,000 kilometers away from the earth, so it's pretty hard to see from the ground. So having something that is in that orbit provides us much, much better coverage. And it will allow

Space Force, NRO, and others to have a much, much better understanding of what's going on in the geosynchronous orbit. Hope that helps, Bill.

Q: So the question is for Tory, I suppose, and for the other partners, this is the last NRO mission that Atlas is going to be flying. You know, as ULA begins to transition into Vulcan, if you could just speak about both from a high level, you know the significance of making that transition and also the technological transition of going from Atlas to both – you know with these national security missions, obviously their whole certification flights before then but, you know, just marking the moment.

MR. BRUNO: Sure, great question. It's bittersweet. I mean, we've done 97 national security space missions. I believe 33, if I have the number right, just for the NRO. And this will be Atlas's final mission for NRO so you know, in the 5-5-1 configuration. You know, this is such an exciting mission. It's our mission that we're designed for, so it's kind of a fitting way to end that. But it means a lot to our guys – you're going to see people with a little tear in the corner of their eye. However, we move from here to Vulcan, and Vulcan will have actually more capability than Atlas – a little bit more than the Delta IV heavy in a single stick. So as we transition forward we're going to bring more things that we can do to contribute to the fight and to the peace. And you know we'll be flying that hopefully in Q4 and we'll continue on the great legacy of Atlas. In a way it's kind of like an Atlas 6 of Vulcanism. Think of it that way.

Q: Thank you very much. I think my question is probably for General Guetlein or Dr. Scolese. So what can you tell us, anything about the number of spacecraft? Is this just one spacecraft or is it multiple? So can you say how many are in this, in this constellation for SILENTBARKER, and secondly, you know the NRO also almost always has their missions, you know, be fully classified. You're talking a little bit about what SILENTBARKER is doing. [I'm] wondering if General Guetlein or Dr. Scolese talked about the decision to open up about this particular mission, why, whereas they don't do that with other missions? Thanks.

DR. SCOLESE: I think you know we're, we're trying to be more transparent and share more information and clearly the space domain is, you know we often say it's, contested, congested, and competitive. It's also becoming, you know, easier and easier to see what's going up there. And you know we want to let people know to some extent, you know, what our capabilities are. And this is one capability that that, if you think about it, has great value, beyond just, you know, the national security community. And oftentimes it's forgotten that the NRO – and I'll let General Guetlein talk about Space Force – but the NRO supports more than just the national security

community, the Department of Defense, and the intelligence Community. It also supports the civil community.

A number of civil agencies rely on the data from NRO satellites to deal with natural disasters and you know things along those lines, humanitarian assistance. In this case, it's going to provide us with, you know, a lot more understanding of what's going on in space to understand, you know, what is happening up there. So that's a critical capability that I think people should be aware that we're doing.

GEN. GUETLEIN: Thank you, Chris. So a huge part of the Space Force mission is not only to defend but to deter aggression. A huge element of the deterrence is the ability for the adversary to know what we can and cannot see. So we actually want our competitors to know that we have eyes in geo, and that we can see what's happening in geo, and not only are we going to maintain the custody and the ability to detect what's going on geo but we'll have the indications and warnings to know there's something out of the normal occurring. And that goes a long way towards deterrence. Bad guys want to work in the dark and we're going to shed light on them.

DR. SCOLESE: That's a good way to say it.

Q: Dr. Scolese, Lieutenant General Guetlein, could you talk a little bit about like sort of the run-ups of this mission? Like the history of the spacecraft, like when did NRO and Space Force and other partners realize they, you guys wanted this capability? And how long did it take to get to this point? And then, looking forward a little bit, how long are the payloads expected to operate? Thanks a lot.

DR. SCOLESE: So I would say, Micah, it was about five years ago that both organizations, both Space Force and NRO realized that we needed a better understanding of what was going on in the GEO belt, and since we both recognized that somewhat independently, we routinely get together. We have a fairly tight relationship where we work together on planning for missions and realized that we were both kind of looking in the same direction and decided to team up together. After we did that, we quickly developed the capability and about three years from the time that we had decided what we wanted to do, about three years ago is when we decided what we really wanted to do, to now. So about a three-year development to build these, to build these satellites and I guess that pretty much kind of captures the history of what was going on with it.

Mike, did you want to add anything to it?

GEN. GUETLEIN: Yeah so when we when we looked at the mission, we both are operating in GEO, we both needed the indications and warnings. We both need to know what was going on in GEO. And it really was a perfect match because the NRO is really good at building satellites for ISR and what we're really asking for was an ISR satellite in geo to not only detect but to maintain custody of was happening in geo. So by leveraging the NRO's mission domain experience in ISR as well as their acquisition authorities, in partnership with space force's ability to have assured access to space, it really was a great partnership.

Q: Good morning. Thank you. I have a question for Tory Bruno. The Space Systems Command said that there's one remaining, after the launch of NROL 107, there's one remaining Atlas launch in the security space. When is the final Atlas launch and when do you anticipate the first Vulcan launch for national security space?

MR. BRUNO: Thank you very much. You were breaking up a little Sandra but I think you asked me when would the last Atlas launch for National Security space and when would the first Vulcan launch for national security space. Does that sound right?

Next year for both.

Q: The final national security Atlas launch, which would be the one more after the one tomorrow – when is that and what mission?

MR. BRUNO: It's early next year and in Mission 51. SF 51. We will follow up with you Sandra and make sure I gave you the right story but it is next year and I believe it's USSF 51, and I don't believe I'm in the window yet when I can tell you more precisely in terms of timing than I just did.

Q: Thanks, I'm sorry can you just clarify, I've heard there's multiple payloads. Is this, are there multiple launches as part of SILENTBARKER? And also can you just go over the schedule for IOC and FOC? Are you looking still looking at FOC for 2026?

DR. SCOLESE: Yes, there's multiple launches which is why FOC has 2026. So you captured that right.

Q: Maybe in general terms, what's different or enhanced about these capabilities of this satellite and is it, is it a completely new design? And it looks at satellites in space? Or is it just a ground thing?

DR. SCOLESE: It is a completely new design. You know, we do strive to advance technology where we can. We utilize what's available and we rely on commercial capabilities as well. But in this particular case we recognize that we needed to do something, you know, very different and the geosynchronous orbit is far away, as I said, and ground-based systems have a harder time seeing what's up there. So this provides us the capability of being in this the same orbit so that we're closer to what's happening up there and it will not be looking at the ground it will be looking at space. Mike, did you want to add anything?

GEN. GUETLEIN: No sir, you got it right. So today we primarily rely on our ground-based radars. Our ground-based radars are pretty exquisite, but they pretty much can only see about a basketball-sized object in space and because of the challenges of day night and weather, it gets extremely hard to maintain custody of those objects. So by actually moving the sensor into orbit with those objects, we can actually not only detect smaller objects but maintain custody of them and when they operate out of the norm we get indications and warning that there's something here. That helps us to maintain in a contested environment, that we can understand when our high value assets – I think of a strategic missile warning that's also up there – that those objects

might be in harm's way and that we need to take a different action. So by getting closer to the environment we can actually see more objects and maintain custody of those objects

Q: That sounds like a huge increase in capability.

GEN. GUETLEIN: Well it's not necessarily the size of the object, but maintaining all-weather day-night capability and being able to maintain custody of those objects as they maneuver in and around geo.

Q: I wanted to ask real quick just about, if you can say anything about the health of the current legacy SBSS constellation, the satellites that are that are still on orbit. And then also um you know we heard, we've heard a lot lately from Space Command about the need for dynamic space operations and, you know, understanding that this is kind of a newer requirement that's being talked about more now, I'm curious how SILENTBARKER satellites, you know, fit into that and if these satellites will be able to provide that sort of maneuverability, and or is that sort of like as you look at future capabilities for SILENTBARKER, how you consider that need from Space Command?

DR. SCOLESE: Well, I mean, you captured it very well actually in your question. What SILENTBARKER is going to do is provide that that indications and warning so it can inform decisions about what we do or don't need to do in in terms of maneuver or awareness.

So it's a great increase in our understanding of what we'll be able to do and we'll greatly improve our ability to determine, you know, future courses of action, and it's really important. I mean, Space Command is absolutely correct in saying that space has become a much more dynamic environment when you think of the number of satellites that are up there, the importance of space to everything we do from communications to navigation to, you know, weather prediction – which we're relying on very much for tomorrow – to, you know, understanding disaster, you know, when there's potential for a natural disaster. So space is becoming, you know, increasingly important and having you know increased awareness is very important. It also requires us to operate in closer conjunction with each other so that we can stay out of each other's way, but also so we can operate very efficiently in space and that's what we do. We work very closely with the Space Command as well on those types of things. I think I captured most of your question.

GEN. GUETLEIN: And Courtney on the question of SBSS, we can't comment on the current status of an operational asset.

Q: Chris, maybe you could talk about who is actually going to have access to this data? I mean you're obviously going to share it within the national security community but are you going to share it with international partners, with the commercial sector? If the commercial sector is worried about something that's going on up there can they contact you and ask you if you can check on things for them?

DR. SCOLESE: Well, we're still you know working out a number of different policy things, but the intent is to understand what's going on up there and be able to provide that information to the users that need it. I can't really go much more than that into it.

Q: Can you talk at all about sharing arrangements, especially with international partners?

DR. SCOLESE: Well that's – the sharing, usually it goes through Space Command typically, and yes, we do share information with international partners.

GEN. GUETLEIN: So Marcia I think an easier way of saying it is that this data will come to the DoD, the DoD will use this data to continue to maintain the space catalog and provide that space catalog free to not only our commercial partners but our international partners. So this data will allow us to have a better defined space catalog of the objects in geosynchronous orbit and of what the behavior of those objects is.

Q: I'm wondering if anything can be shared about what manufacturers and contractors will be working on the SILENTBARKER program or who might be working going forward?

DR. SCOLESE: Sorry we can't share that information at this time.

Q: What do you have to do to get that certified to do these national security launches? Could you go into some detail – is there a certain number of launches you have to have successful before they'll put their valuable satellites on there?

MR. BRUNO: Yeah sure, so, you know, the bottom line is our cert plan calls for two flights – the one that we'll do you know this year in Q4 and then one that we'll do very early next year then we would be certified to fly for national security space. It also covers our needs for NASA, for NASA missions that are in that highest category where the lowest tolerance for risk exists.

To give you more than that, what's our path to first flight. which I keep saying is Q4. The only thing we have left to do is a structural quality test of the Centaur upper stage propellant tank – that's it. Everything else is done. We've been down here to the pad a couple of times, to tank the booster. We've even conducted the flight readiness firings. That effort to get that, basically it's a pressure test, essentially is underway right now. We'll do that at the Marshall Space Flight Center where the test article here in just a couple of months, the article that will fly, is being built. It's fully welded up as a tank, it'll be in a proof pressure test like any day now down at our factory in Decatur we'll put insulation on it, bolt all of the avionics to it, and ship it down here on the rocket ship. So it's literally – path to flight is one thing, everything else qualified in the vehicle and fly it twice and we'll be in a position to support General Guetlein here.

Q: Can you talk about the interaction with Space Force in doing all that?

MR. BRUNO: So when you set up a cert plan you kind of have two broad paths – you can say go away and don't bother me I don't want you to slow me down and I'll show up when I'm ready, and then you generally have to fly several times –three, four times, even five times. Or you can say, I recognize that you're an awesome partner and why don't you come in on the first day and we'll work together on this. You'll attend all the meetings, you'll see all the data, and we'll do this incrementally as we go through. That's the path we chose to take and as we have progressed through all of this. Of course, it's our program – we're responsible, we're accountable, but our

government partners have been there every step of the way and when they have opinions on things, technical opinions on how things are going, they share them with us. We value them and the partnership's been great and we're right at the end. We're 99% done have valued the way we did it.

GEN. GUETLEIN: We made the right choice – it really has been a very strong partnership along the way we don't just walk in at the end and grade your homework. We have, you know, decades of launch experience and we want ULA to be successful, so we were sitting there every day shoulder to shoulder with them as they were going through all the engineering reviews and all the tests and then reviewing all the test data and it various collaborative back and forth – Have you guys thought about this? Have you guys thought about this? And it's very much a teamwork from the very beginning.

DR. SCOLESE: And this is another example where NRO and Space Force work very, very closely together because obviously we ride on these rockets. So we want to know what's going on and we're very, very much involved with it as well so it's a really tight partnership, in this case between industry, Space Force, and NRO

MR. BRUNO: To talk about the context of a mission like this I would point out that this is the great power of our system – the partnership that exists between industry with its ability to invest, its ability to innovate, and our government. In government and, you know, military customers that have the needs that we strive to support, this allows us to go faster and to have better technology and to get in front of adversaries when they want to threaten us in the space domain.

Q: I really had a weather related question about Idalia intensifying in the Gulf. Obviously if there's some issue where you cannot launch tomorrow, what is the backup plan?

MR. BRUNO: We'll come back on the range when we can. So I'll give you the latest: all right, so as of however long we've been sitting up here, we're obviously watching the storm pretty closely, our POV (our probability of violating weather) for tomorrow is currently assessed at 20 percent which is really good. That means we get an 80 percent go, the thing that we will be watching for tomorrow are what we call cumulus and anvil clouds, which is another way of saying lightning. We really hate it when the rocket gets struck by lightning and so that that kind of weather makes that more likely however, that's basically a 58 minute, basically an hour-long launch window tomorrow at 8:34 a.m. if we can't make that we would have to go for the next day. Well it completely flips uh the next day. It's only a 20 percent go and the concern will be high winds. We can take about 54 knots sitting on the pad and so if we can't make that, then our next opportunity on the range is a few days off. I can't give you the date yet because it's still in coordination, but we'll have to wait and so we're going to be making a decision tomorrow. High winds are a thing that don't get solved by staying on the ground. Lightning is and it takes us 24 hours once we're fully tanked to get our cryos back off so we can roll back to the VIF and button it up to protect it from the winds. So if we can't go tomorrow morning, we'll be looking at that weather very carefully and we'll make a decision about whether or not we can risk it for the backup day. If we can't we'll roll back to the barn and we'll wait till it's safe.

Q: I have had a couple of questions about post launch activities. First, what does the I guess, test and checkout phase for this initial payload look like in terms of timeline, and then once SILENTBARKER reaches full operational capability in 2026, who is going to be operating it? Will it be NRO or Delta 2 at SpOC? The combination of both? Any clarification on that would be great. Thank you.

DR. SCOLESE: Sure. Well this is, as we talked about, this is a new payload, so the timelines are a little bit fluid. But I think about 30 to 90 days for a checkout phase and getting into operations, and then it'll be operated, you know, jointly at the SpOC at NSDC. So it's a joint mission and we're working together. Does that answer your question?

Q: Yeah just to clarify, will it be Delta 2 that will operate this? No it will not be. Okay can you share which portion of the box?

GEN. GUETLEIN: It'll be uh with, the data will come into the NSDC where their operator is located at Colorado Springs but the satellite itself will be maintained by the NRO.

Q: Thank you very much. There was, I have a little confusion about the multiple payloads answer to two earlier questions. Are you saying there's multiple payloads on the rocket tomorrow? Are there multiple payloads on all the launches in the SILENTBARKER program or were you meaning you're having multiple launches with single payloads? I was just unclear about what the multiple referred to. Thanks.

DR. SCOLESE: A strange way to answer the question is yes. So yes, there are multiple payloads on tomorrow's launch and then future launches may or may not have multiple payloads.

Q: How many launches are expected in the SILENTBARKER program?

DR. SCOLESE: We're thinking two, but obviously there'll be refurbishments as we go along. So two in the current plan and then perhaps more as satellites age out.