

An Interview with Gen David L. Goldfein

Twenty-First Chief of Staff of the US Air Force

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General David L. Goldfein serves as the senior uniformed Air Force officer responsible for organizing, training, and equipping 660,000 active duty, Guard, Reserve, and civilian forces serving in the United States and overseas. As a member of the Joint Chiefs of Staff, he advises the secretary of defense, the members of the National Security Council, and the president.

SSQ: As you move through your first year as chief of staff, what national security issues are most concerning to you that will impact the Air Force during your term?

General Goldfein: Over the past year the chairman has led an effort within the Joint Chiefs to refine and build a national military strategy that looks at the global challenges we face, which the secretary of defense laid out as a “four-plus-one” framework: China, Russia, Iran, North Korea, and the *plus one* is violent extremism as a condition. Each of the Joint Chiefs has contributed to looking at the global security challenges to ensure we have a national military strategy that gets after them. And so, from an Air Force perspective, the question I’ve focused on is: what’s the air component contribution to the joint force as a member of the joint team? The lens I look through is, first, what we do for the nation from a deployed-in-place perspective, and what we do for the nation when deployed forward. Thinking about the air component, you have to look at both. And very often we, the military, will tend to describe only what we do from a deployed-forward perspective. That misses so much of what the in-place force provides that is foundational to joint war fighting.

So, for example, consider the nuclear enterprise. Quite frankly, a safe, secure, reliable nuclear deterrent underwrites every military operation on the globe. Job one is ensuring we have and produce, with the Navy, three legs of a triad, including all of the nuclear command and control, which is primarily an Air Force responsibility. It’s job one because you can’t look at four plus one—China, Russia, Iran, North Korea, and violent extremism—without first looking at what’s been going on with

our strategic nuclear deterrent. I mean, in my personal opinion, there's a direct, solid line between what we're doing in the Middle East against violent extremism and the strategic nuclear deterrent of this nation. That's the first thing I think about driving to work. I have General Robin Rand, General Jack Weinstein, and a large team focused on the nuclear enterprise as well. I make sure we get this right.

The second thing I watch is what's going on in space, particularly space architecture and the space enterprise. What is our readiness to operate? Now remember, I organize, train, and equip. I produce ready forces for a combatant commander, and that combatant commander fights with that force. But it's sometimes challenging to articulate the readiness level of our space forces to the American people and to national leaders. Space forces, like the nuclear forces, may be unavailable to deploy forward because they're doing the job deployed in place. Likewise, for instance, cyber forces protect the nation every day, contributing to the four-plus-one strategic framework. Cyber is clearly a contested domain, and the Air Force is central to the way the nation operates relative to defending the networks and having those capabilities available to a president. So you've got to walk yourself through the missions we do from a deployed-in-place perspective: nuclear, space, and cyber.

Once you make sure the air component part of those capabilities is ready, then you can move to what we do deployed forward. Things such as global mobility to ensure we can move millions of ton-miles per day of logistics for the nation, the joint force, and our allies. We must get the tanker bridge we need to rapidly move and sustain forces that are fighting over landlocked countries, for instance. The conventional airpower provides the kind of striking force that we're using against ISIL. It ensures we can gain and maintain air superiority and deter aggression. The air component brings command and control and personnel recovery to the fight, and all those things we do from a deployed-forward perspective. Of course the foundation of that work is on our bases, because as an air component that's part of our fighting platform. So, the long answer to your good question is I'm thinking about those missions we contribute to defend the homeland, ensuring we've got the four-plus-one framework thought out as part of a national military strategy, and how our foundational capability is ready, capable, and resilient.

SSQ: In your congressional testimony last year, you stressed readiness. Is the Air Force "right sized" to adequately provide forces for combatant

commanders? If not, where are the shortfalls, and what must be done to fix them?

General Goldfein: No. We're not right sized. The reality is, since Desert Storm and certainly over the past 15 years, the story is the same. That is, the Air Force made some conscious decisions to trade capacity and readiness near term for capability in the future. We went down a path, and I was part of a dialogue on this, so it is not a 20/20 hindsight. The world looked different because we had been rather singularly focused on violent extremism in the Middle East. Since there hadn't been state-on-state kind of activity that we're seeing today with the four-plus-one framework, it made sense in the previous global security environment, perhaps, to trade capacity and readiness for future modernization and capability that the Air Force needed—desperately needed. With an average aircraft age of 27 years, you know we have to modernize. But in 2014 the world changed. Russia went into Crimea. Russia got active in Ukraine. China got active in the South China Sea. Iran got more active in the Middle East. A lot of things happened in 2014, and the global security environment changed.

For what the air component and the Air Force do for the nation, we are too small—too small to generate the readiness required and too small to do the missions at home, in garrison, deployed in place, and deployed forward. I've looked across the force at our biggest limitation in producing the kind of airpower the nation requires and the joint team has come to expect—we've got to get bigger. We need approximately 350,000 active duty with commensurate growth in the Guard/Reserve, and we need to stabilize civilian manpower across the Air Force. It's a troop-to-task issue. Here's the missions we've been given. Here's the global security environment. Here's the number of people required to do it.

SSQ: Last year at the Reagan National Defense Forum, you mentioned the importance of a modern and reliable nuclear deterrent. Since the Air Force maintains two legs of the nuclear triad, are you satisfied the current funding process remains valid? Or would a separate budget line, similar to Special Operations Command, be more appropriate?

General Goldfein: Well, it's a bigger, broader question when you take a look at the overall cost of recapitalizing the nuclear enterprise, and all three legs are due: the Air Force bomber and the missile legs, including

the munitions portions of this, and clearly in the Navy as well with their submarine force. Also we can't forget the nuclear command-and-control piece that actually is the foundation for all of it. Because if the president's not connected, it really doesn't matter how well we recapitalize and modernize individual legs because you can't execute the mission. So we've got to look at the entire enterprise approach going forward.

Even at the predictions of the high end, we're talking approximately 6 percent of the overall defense budget that would go into recapitalizing the nuclear enterprise. That's a significant amount of money. But I'll paraphrase a great quote from my US Army counterpart General Mark Milley at a hearing when he said, "The only thing more expensive than deterrence is fighting a war. And the only thing more expensive than fighting a war is losing a war." And so I'm one who absolutely believes—and the best military advice I will offer is—we need to recapitalize this part of our business. Because I go back to my earlier point: every military operation on the globe is underwritten by the nuclear deterrent.

SSQ: During the Air Force Association convention in September, you mentioned three focus areas for your tenure as chief. One of those was strengthening joint leaders and teams. Why do you see this need, and what long-term outcome do you hope to achieve?

General Goldfein: To achieve joint war-fighting excellence in the twenty-first century you must align four elements: the organizational element, the leader development element, the operations CONOPS [concept of operations] element, and the technological element. This is what I believe the air component and our Air Force must be prepared to contribute. Each of the three areas I want to focus on—revitalizing squadrons, strengthening joint leaders and teams, and multidomain command and control—directly supports those four elements. All of the three areas have connective tissue between them, and they all end with joint war-fighting excellence in the twenty-first century.

It begins with an organizational element, and I've chosen to focus on revitalizing the squadron level. Based on my experiences growing up in the Air Force, it's the squadron where the mission succeeds or fails. That's why I called the squadron the heartbeat of the Air Force. We have to get that part right because it's where Airmen get developed. It's where we inculcate the culture of being an Airman. It's where we generate readiness, and it's where we succeed or fail. So, that's the organizational element. Let's get that piece right.

Then there's a leader development piece, which is what you're asking about, and that is what constitutes the product we're looking for in the future as we refine, strengthen, and develop joint leaders. For me, what that means is when an Airman walks in, immediately that person is recognized as someone who understands the operational integration of air, space, and cyber. Now, we've got to take a fresh look at our development of leaders to say, when during a career are you exposed to the operational art of space?

And space can no longer be the responsibility of somebody that just wears space wings. It's got to be a responsibility of everybody who intends to lead in our Air Force to understand the operational art of the integration of space. That's a different development track. It means someone has to live it. When an Airman walks into a planning room and sits side by side with Sailors, Soldiers, Coast Guardsmen, and Marines, those joint team members must see an Airman who understands the operational integration of space and cyber into the campaign-design level of joint warfare. At the same time, the Airman must understand the application of airpower.

And so, when I talk about joint leaders of the future, the foundation of that is, first and foremost, building leaders who know the operational art of air, space, and cyber integration. And then you get to the next level on Maslow's hierarchy that says you comprehend how air, space, and cyber fit with the other domains—being the land and maritime domains and the expeditionary amphibious domain. Airmen must understand how it all comes together; so, we sit down and build campaigns that are truly joint in nature and ensure an Airman's voice is in the middle of the dialogue. Airmen must also be prepared to lead an operation once the plan is built. I believe we have an obligation as a service to produce leaders who are ready to step up and lead—just like those we have today in General Lori Robinson, in General John Hyten, in General Darren McDew, and in General Paul Selva. The word *strengthening* applied to joint leaders and teams is so important because I'm not trying to fix anything that's broken. I just want to strengthen what we're already doing well.

I want to also mention my third focus area, which is multidomain command and control. Multidomain command and control brings together the concept of operations and the technological aspect of twenty-first-century joint war fighting. Once you've got the organizational piece right and have developed leaders who understand how to operate at the

operational level, you've got to have the CONOPS that tells you how you're going to operate in air, space, and cyber and how they fit with everything else. Then you need that technological baseline which can be linked to all of those elements. But it's not just a CAOC [combined air operations center] of the future with big screens. This is about how we ensure we can get to decision speed and achieve operational agility at a speed that provides multiple dilemmas to an enemy from all domains at a speed that no adversary can match.

The United States is truly a global nation with global responsibilities and global capabilities. When we bring all our capabilities together, any adversary that's thinking of stepping over a line will think twice. In my mind, that provides just as much deterrent value as joint war-fighting capability. And so, it's all of those elements combined that you've got to assess to create joint war-fighting excellence for the twenty-first century, which is why you'll see me continue to focus on my three areas.

SSQ: There has been a lot of discussion on artificial intelligence (AI) and autonomous systems over the past year—particularly involving the use of lethal force. It seems as if people either embrace these concepts or fear them. What are your views on the future of artificial intelligence and autonomous systems?

General Goldfein: Well, I'll give an example of where I think we're already using it and where we've got to continue to improve. The Air Force has a significant portion of the ISR [intelligence, surveillance, and reconnaissance] enterprise—not all of it, but a lot of it. Now think about how we sense the globe today. We sense it in six domains: air, land, sea, space, cyber, and, I would argue, you should add *undersea* as a domain. You have to think about each of these domains together when you talk about sensing the globe and how we do that. Today, social media provides a huge input to what we can sense, and we get some of our best intelligence from social media.

So, the question becomes at what point is the volume of what you sense so large it actually starts slowing you down as opposed to speeding you up? The only answer, in my mind, is to get into the business of artificial intelligence and machine-to-machine learning. We need to neck down the terabytes of data we collect to the point of decision because the victor in future combat will be that person, that leader, who is able to command and control and move forces and deny the enemy the ability to do the same. This is going to require decision speed, and decision speed is

based on your ability to analyze volumes of data. We are only going to be able to get that if we do it through artificial intelligence. I see great promise in AI, and it is an essential quality for the future. We have to move forward toward that capability.

SSQ: Every new administration brings certain change to the Department of Defense. What changes do you anticipate for the Air Force as a result of this new administration?

General Goldfein: Well, I think there's going to be some early debates that I'm preparing for right now because I think they're really important debates. The debates will present far more opportunities than challenges. I think we're going to enter into an early, robust debate about the business of cyber: how we're organizing cyber, how we're executing missions in cyber, and how we're defending our networks. More importantly, how resilient we are in this contested domain to be able to continue to fight. Let me tell you, when General James Mattis was the CENTCOM [US Central Command] commander and I was his air component commander, I remember him looking at me, without blinking, and telling me, "Don't tell me you can't fight without all of your exquisite communications. Make sure that you can continue to fight if you lose all of this." So, I think we're going to have a robust debate because I'm pretty confident he hasn't changed his mind on ensuring we can still operate in a degraded and contested environment such as cyber.

I think we're going to have a very important debate about the organization of space. As a service chief, I organize, train, equip, and present ready space forces and capability to the STRATCOM [US Strategic Command] commander and the geographic combatant commanders in support of their operational plans. It is my intent, in terms of my best military advice, to talk about space as a contested domain and a war-fighting domain. The question then becomes how do you normalize space as a war-fighting domain like other war-fighting domains? So, we've got to have a healthy debate about the organization of space in the new administration.

Historically every new administration will generally conduct a nuclear posture review. And here, too, I'm expecting a healthy debate. Since I'm responsible for the majority of the nuclear enterprise, along with Admiral John Richardson, I'm expecting to have a strong voice in that debate. These are just three of many issues I think will be debated in a healthy dialogue I'm looking forward to.

SSQ: Civilian control of the military is a hallmark of our democracy. Are you concerned the new administration may have too much military influence in what has traditionally been purely civilian roles?

General Goldfein: I'm not concerned about that because of the quality of the individuals we're talking about. I've had a chance to serve with all of them, and they bring a depth of understanding of national strategy. They've been on the receiving end of national strategy. They've had to execute it. So, I think they're going to bring an important perspective. You have to look at the overall administration. If you do, you will see some from military backgrounds, some coming from a civilian industry background, and others that have a political background. So, you have pretty good breadth and depth of backgrounds coming into the new administration. I think it's positive to have some in the administration who have an understanding of the military.

SSQ: If you inherited the ability and the permission to change three things within the Department of Defense, what would you change?

General Goldfein: The first thing I do think we need is a healthy dialogue about the Goldwater-Nichols act. It was incredibly important legislation 30 years ago, and it more than accomplished its objective. I'm a product of Goldwater-Nichols as a joint officer, now a member of the Joint Chiefs, and former director of the Joint Staff. But the law was passed 30 years ago, and it's time to take a new look at the agenda that created it. The pendulum swings between relative spheres of influence. For example, what constitutes the responsibility and role of a service chief? What constitutes responsibilities of the service secretary? What are the responsibilities of the various branches? How do the checks and balances come together? Are there new ways of looking at the various positions and how we're organized? What is the role of the chairman and the Joint Staff relative to building the force? Some of this debate is happening right now and I expect the new administration will want to consider Goldwater-Nichols "next." These questions deserve a really important discussion.

SSQ: The heart of leadership is sound decision making. Do you have a certain way of deciding tough issues? Are there some decisions that challenge your abilities, and which decisions seem easier for you?

General Goldfein: Well, first, I'll tell you that I try pretty hard to ensure all the decisions I'm making are the tough ones. Because if I'm

spending much time making easy decisions, I'm doing somebody else's job, and they don't need my help—and, quite frankly, they don't want it. By the time a decision hits the chief's desk it ought to be really hard. The hardest. And then you understand that the reality of why it's hard is that there's not one clear solution. You don't have perfect information. You've got to balance the risk and understand the impacts and the branches and sequels and unintended consequences. So, for me, I've learned over the course of my career from mentors along the way. I've seen other leaders and the way they make decisions, and I've adopted many of those techniques with my own style. What I've found is that one of the first questions I ask is: when does this decision need to be made?

Early in my career I wanted to be decisive, but I learned over time that it was better to make good decisions. So, the first question is: when does that decision need to be made? Because the answer to that question gives you a sense of how much time you have to actually study and research and talk to others. Sometimes the answer is, "General, with all due respect, we need a decision now." Then you go with your gut and your background—your experience—and you make the best decision you can at the time. Once I've got an idea of how much time I have, I like to hear—depending on the kind of decision—differing opinions. It's the old adage, "If we're all thinking the same way, then somebody ain't thinking." So, I try to find people who completely disagree with each other and then listen to both sides, three sides, whatever, of the argument. That helps me conceptualize the framework within which I'm operating. I also try to think of what other voices should be in this dialogue that are missing. Because, as uniformed military, you know, we've all had a very similar upbringing; so, we tend to approach problems the same way. As director of the Joint Staff, I got to see the different cultures of the services at work. And I came to the conclusion that we each approach a problem from a slightly different perspective based on our service culture, which is a byproduct of the domains we're responsible for. An Airman takes a specific kind of culture to problem solving. A Soldier has a different kind of culture for problem solving. So, for me, I actually am looking for some voices of others that don't have the same upbringing, background, and culture I have that can give me a completely different sense of what it is we're talking about. I spent a year with the State Department, you know. They think about things in a different way. Theirs is a very valuable perspective to have in the dialogue.

Once you've studied the issue, you understand the details as best you can based on the information available, you've gotten the voices around the room from the different perspectives, then, quite frankly, it's time to sit back, take it all in, and make a decision. Of course, with tough decisions, you know full well there's no perfect answer. You have to be willing to reassess a decision and realize if it didn't work out, I made the best decision I could at the time. Sometimes, life gets in the way of a perfect plan, and then it's time to step back and admit that wasn't your best day; so, let's relook this one. Finally, you've got to be comfortable enough in your own skin to do this.

SSQ: Thinking over your career, was there some experience or education you had during your career that helped prepare you to be chief of staff?

General Goldfein: You know, they all do. I mean, all the experiences added up. I'll give you a few examples of some that were really important to me. But one really important point is, look at the bios of all the four stars in the Air Force today. There's not one that looks alike. Not one of them looks the same. I'd like to make sure our Airmen know that there's no one path that gets you to chief of staff. Look at General Ron Fogleman, who was a history instructor at the Air Force Academy. Take a look at General Mike Ryan, who was an exchange officer with Australia. All the experiences matter, and there's no one path to the top.

There have been a few experiences I probably rely on the most. The first was the opportunity to be the aide to General Mike Ryan when he was the CFACC [combined force air component commander]. He built and executed the first air campaign over Bosnia. Being on the inner circle to watch how he made decisions and how he actually ran an air campaign was very helpful for me when I grew up to be a CFACC and ran an air campaign.

Another experience was spending a year with the State Department on a fellowship and coming to admire the courage, the professionalism, the dedication, the commitment of our foreign service and what they do for us every day around the globe with very few resources. The air component helps them with coercive diplomacy, and learning how force and diplomacy come together has been very helpful to me as a member of the Joint Chiefs—to help think in a broader perspective than just the application of military force. And now, you know, I'll forever be one of their biggest fans and a big advocate for what our diplomatic corps does for us.

I will tell you, taking a squadron to war was formative and knowing the pressures on a commander goes back to why revitalizing squadrons is so important and that the command team and the development and support of that command team are so important for how we operate as an Air Force.

Let me also say that understanding the operational part as the air component commander for CENTCOM was formative, because it's there that you actually see all the elements come together. As the air component commander, you tend to naturally be the integrator of capabilities because you have that one headquarters that has the robust elements of each component represented on the team to be able to coordinate the activities.

The final experience I would offer is being the director of the Joint Staff. There you are seeing the strategic view of how actions operationally fit into a strategic framework of best military advice from the chairman and the Joint Chiefs to the commander in chief, the secretary of defense, and the national security team. You witness their decisions and how their perspective on what constitutes defense of the homeland, for instance, is so much broader than we focus on from just a military perspective. So, that's sort of the evolution of Dave Goldfein, if you will, in terms of experiences that broadened my horizon.

SSQ: Chief Goldfein, any journal is only as good as the profound ideas and insights published in it—ideas and insights like those you shared today. On behalf of the *Strategic Studies Quarterly* team and the entire SSQ audience, thank you, and we wish you great success as the twenty-first chief of staff.

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