



General David L. Goldfein is Chief of Staff of the U.S. Air Force (DOD)

that tends to be what is most on the radar for not only leaders in Washington, DC, but also the American people.

Let's first talk about what we do from a deployed-in-place standpoint. It starts with the nuclear enterprise. The Air Force is responsible, with the Navy, for two-thirds of the nuclear triad, and 75 percent of the nuclear command and control, which is the foundation of the nuclear enterprise. You can have great individual pieces and parts, but if it's not connected to the President, then it's not a nuclear enterprise. It's not safe, secure, or reliable.

You have to consider the 35,000 Airmen who are deployed-in-place in the nuclear enterprise, which overrides all military operations that we conduct around the world. You can't talk 4+1 without actually starting a dialogue in the nuclear missile fields and with the bomber force and the NC3 [nuclear command, control, and communications]; there is direct connection throughout. If a contingency begins anywhere on the globe, those forces are unavailable to go forward because they are doing their mission deployed-in-place. That's the first thing.

The second thing you need consider is what we do in space. With the exception of small pockets, the vast majority of the forces that conduct the business of space is deployed-in-place. Just like the nuclear enterprise, these forces are unavailable, with small exceptions, to go forward. They are going to be doing 4+1 at the same time we are doing all the things to defend the homeland and everything else that we do around the globe.

Space has become a contested place. Looking at how we fight in space should a war extend there is job one for the Air Force because we normalize the way we do warfighting, and we do warfighting by organizing, training, equipping, acquiring, and sending forward-ready forces to a combatant commander who then fights the fight.

We need to lead the debate on how we normalize space as a warfighting domain so that I provide those forces to combatant commanders; and whether they are geographic or functional commanders they then fight those forces and rely on

## An Interview with David L. Goldfein

**JFQ:** *What does today's Air Force bring to the joint fight that deals with what the Chairman of the Joint Chiefs of Staff has described as the "4+1" challenges: Russia, China, Iran, North Korea, and Islamic extremism?*

**General David Goldfein:** To see what the Air Force does for the Nation as part of the joint force, there are several lenses you should look through. I'd begin by looking at what we do from a deployed-in-place outlook and what we do to deploy forward. It's actually easier to describe what we do to deploy forward, and

what we bring from space, whether you want to talk about communications or precision navigation and timing, or all the other things we do to sense the globe as part of the ISR [intelligence, surveillance, and reconnaissance] enterprise.

You have to think about what the Air Force does for the Nation in the business of space operations. Then you have to transition to cyber. Like space and like nukes, the cyber force, with small exceptions, is not required to deploy forward and simultaneously defend the homeland, deter the nuclear threat, and be involved in 4+1.

You have to walk yourself through these mission sets, and I would add ISR to that, because the vast majority of the ISR enterprise actually does not deploy forward. The sensing piece does, but the reachback that it takes to do the analytical work every day and turn it into decision-quality information, that's an enterprise.

That's this whole part of the Air Force that can be viewed as under the waterline. It contributes directly to 4+1 and homeland defense—and it contributes to strategic deterrence. Then we start thinking about what we deploy forward. We'll start with global reach. We are truly a global power because of our global reach. You have to examine what that looks like and the requirement for us to deliver a certain number of million-ton miles per day across the globe as a validated joint requirement. Then we have to take a look at what we are doing in the business of conventional airpower forward. We could consider what we are doing in the Middle East, on the Korean Peninsula, or in Europe. We could also take a look at what we're doing in U.S. Southern Command.

Getting the decision speed faster than your adversaries and then having the operational agility to move forces where required to be able to produce dilemmas for the enemy that they could never match are paramount. If you take a look at that end to end, the reality is you are going to be hard-pressed to find a mission that the joint force performs that doesn't have an Airman present. Whether in space or in cyber or ISR or delivering airpower, we are always there.

*JFQ: On a more domestic front, you stated that one of your main focuses is to look at Air Force squadrons. I know you have written a book about this; I remember the day you talked about it as a fellow. Why is this still important to you?*

**General Goldfein:** My experience has been that the squadron is the level of command and the level of leadership in the structure of the Air Force where we succeed or fail as an organization. It is where the *command team*, which I define as the squadron commander, a senior [noncommissioned officer], is going to have the most influence on the culture of an organization. It is where we build readiness. If you buy that and if you believe that's the heartbeat of the Air Force, then it's worth putting a laser focus on it across the Service to ask how are we doing? How are we doing at first identifying the folks we believe have the potential for squadron command, and, once we have identified those individuals, what do we do about it? What do we do to prepare them? What tools are we arming them with? If in fact it's the most important level of command they will ever have, and that we will ever have as a Service in terms of what we contribute, what are we doing to prepare them for success?

Moreover, once these squadron commanders are in command, are we tossing them in the pool to see if they can swim as a test for the next level, or are we supporting them with everything we can to ensure that we are investing in their success? And are we holding them accountable for success, and the mission we have given them?

There is this code that you and I grew up with. The code is "leadership challenge." What that really means is I'm not going to give you all the money you need and I'm not going to give you all the people you need, but I expect you to get the job done. Some of that has been part of our history, and others have done this before us, so how do we ensure we are fully supporting these squadrons while they are in?

There is also a sizing piece to this. Right now, we have over 2,000 squadrons of different sizes, shapes, and

mission areas across the Air Force, and they go from 40-person organizations to 1,400-person organizations, and everything in between. Now start doing the math. Two thousand squadrons, 2,000 first sergeants, 2,000 superintendents, 2,000 DOs [directors of operations], 2,000 times 2,000 times 2,000—that's a lot of manpower.

But do we have these sized correctly? When we built the unit manning documents for these organizations, we didn't build them based on an expectation that 20 to 30 percent of the squadron would always be gone on continuous deployed operations. We built them based on the force we needed to do the job. If you go to a personnel recovery squadron, I suspect the commander will never have his squadron together, 4 months on, 4 months off, 4 months on, 4 months off.

*JFQ: What is your assessment of how the Air Force is doing?*

**General Goldfein:** I think we are like we have always been. We have squadron commanders out there who are absolutely crushing it. Here's what is interesting. As I travel around, I find there are four things that go into a successful command team. It's family, organizational culture, understanding the mission, and accomplishing the mission.

I can walk you into a missile squadron, and then I'll take you to a contracting squadron at Mountain Home [Air Force Base (AFB)], and then I'll take you to a space squadron at Schriever [AFB], and I can show you every different kind and flavor of squadron. Morale is high. They have taken on the culture of the organization. The common thread between those who are doing well and those not doing as well is the command team.

If a commander has taken on the responsibility for family and culture, then that squadron is going to be cooking. Now we have some institutional issues that we have to work, such as whether we are sized right, giving the needed tools, and supporting the commander.

At the same time, I'm hoping that one of the positive spinoffs will be a fresh



Airman with 1<sup>st</sup> Special Operations Aircraft Maintenance Squadron participates in Emerald Warrior 16 on May 3, 2016, at Hurlburt Field, Florida (U.S. Air Force/Jordan Castelan)

look at where decision authority resides. My gut tells me that as an unintentional consequence of downsizing and consolidating and moving people out of squadrons, decision authority started moving up. Now I've got people who are entrusted with the mission of the Air Force—whether we succeed or fail—but may not have the decision authority they need to accomplish their mission. We're taking a fresh look at that, too.

*JFQ: How have ongoing budget pressures affected how the Air Force operates today and its plans for the future, and what steps have you taken to mitigate these fiscal issues?*

**General Goldfein:** The biggest challenge that we face as Service chiefs is not having a stable budget environment to plan and build the best Service we can. We need a budget that allows us to have money in more than 1-year increments. We have experienced so many years of CRs

[continuing resolutions] followed by a 1-year budget, possibly 2.

What it does to a Service chief is you start building in unintentionally bad behaviors. We are never going to get money in the first quarter of any given year because, historically, we are going to get a CR every year, and then the force starts thinking about how it spends, and working a budget plan that we cram in at the last half of the year. We live on life support, and it becomes grossly inefficient. It's budget instability and the lack of being able to plan that is keeping us from getting into some programs that, quite frankly, would be really good for the Nation—the multiyear kind of programs that allow us to get the price points we need to deliver the best capability for the dollar.

What are we doing about it? I give General [Mark] Welsh [20<sup>th</sup> Chief of Staff of the Air Force] a lot of credit for this. He and his team spent 2 years building a strategic plan with the Air Force future

operating concept, and as part of that, he put in place a developmental planning process that helps us look further out to determine where it is that we need to look, where we need to be in 2030—what we need to think about regarding the global security environment. It's not a crystal ball, but planning. The value of planning is the *planning*.

The first ECCT [Enterprise Capability Collaboration Team] that we did on air superiority is already bearing fruit. In terms of now laying out a path—where we need to head in the business of air superiority as a core mission of the U.S. Air Force—the next step is going to be multidomain command and control.

*JFQ: Regarding the integration across multiple domains and components—and the Air Force's role as the connective tissue to make that happen—how do you view this role for the Air Force? Why is it so important?*

**General Goldfein:** It starts with the fact that it is one of our five core missions, going back to 1947. Command and control is something that we do for the joint force, as a member of the joint team. So, first and foremost, I don't look at this from a competitive lens; I look at this from an *obligation* lens. I think that we have an obligation. I marry that idea with my experience as the CFACC [Combined Forces Air Component Commander] forward, and one of the lessons learned in that experience was this: I went into the job thinking that I'd spend most of my time just making sure I had the right kind of air with the right attributes over the ground force commander, understand the ground force commander's scheme of maneuver and objectives, and just marry up and make sure we always had him covered.

We did that, but to be honest with you, that's not where I spent most of my time as a CFACC. I spent most of my time being the connective tissue for the combatant commander and doing regional command and control because there was no parallel to the CAOC [Combined Air Operations Center]. There was no parallel in any of the other components that brought the size of the various elements that I had on the floor and on the staff.

My BCD [Battlefield Coordination Detachment] was 60 soldiers. My SOF [special operations forces] element was rather robust. I had interagency coordination. Space and the Navy were our connective tissue to the maritime [operations] center. It was the place where it all came together, and where we actually accomplished multidomain, multimission, and regional command and control.

I looked at it through a lens to say that this is an obligation for the Air Force, and as I look toward the future of combat and conflict, I'm one who believes victories in combat—*planned* combat—are going to go to those who successfully can command their forces, make decisions, and move forces, and create dilemmas from all domains simultaneously if required, with resilience, so if I'm taken out in one domain, I can attack you in five others. It's going to be

that individual who can deny the enemy's ability to do that same thing. He is going to win.

Looking through an obligation lens is why I believe that we, from a joint perspective, have to think through what the future of multidomain is going to look like; it's not a place. Anybody who thinks about a "multidomain" as a bigger CAOC with more screens is completely missing the picture. It's CONOP [concept of operations], and that CONOP is about connecting a grid that senses the globe from six domains (I say six because I include the undersea as a domain).

When we think of the cyber domain, we should start thinking about social media because we sense in these domains, and then the question becomes how do we pull together all the sensing and turn it into decision-quality information? How do we take pre-effects from those same domains? It is sensing, effects, decision speed, and operational agility that are going to define the victors in future campaigns.

*JFQ: I sense from what you just said that your future vision is to disperse this as far down the command and control line as you possible. Is that your vision? Similar to mission command?*

**General Goldfein:** Yes. Here's how I look at it. We walk around and look at pictures of airplanes on a wall. The 20<sup>th</sup>-century approach would be to procure a weapon system to replace that weapon system so that I can expand the mission set and get to the next level of capability. By the way, eventually you have to figure out how to connect it to a network. That's the 20<sup>th</sup>-century approach. Here's the 21<sup>st</sup>-century approach: build the network, and then build your apps. Some of your apps fly, some of them drive, some of them walk. Some of them are in low Earth orbit. Some of them are in GEO [geostationary Earth orbit]. If you think about it in that mindset, it totally reverses where you focus.

Actually, it's the network that gives us the ability to have that asymmetric advantage, and then it allows us to start

thinking about procuring all the apps in a way that is different from what we have done in the past, which is focusing all energy on big programs, and lots of dollars.

*JFQ: You're stating that in the past there were more pieces to the puzzle. You are now starting with a view of what the puzzle was to begin with.*

**General Goldfein:** That's right.

*JFQ: To decide whether that fits or not.*

**General Goldfein:** Yes. When I talk about multidomain command and control, keep in mind that I'm looking at it from a network perspective. It's actually cultural. It's easy for an Airman to think about. An example I use when I talk about family of systems is your typical personnel recovery. What happens when someone is injured in enemy territory, a place where there is a contested environment? Think about all the steps that occur. This massive choreography that goes into place that is far beyond the HH-60. It goes from a radio call on a small handheld radio in the Hindu Kush. That call is bounced off an airborne layer amplified into satellites over protected or unprotected [communications] into a command control headquarters, often more than one. Then it is jumping into chatrooms, determining information, pulling up data on the individual, and determining what kind of help is needed.

While all that is happening, we are moving ISR overhead. We are cataloging where the enemy is. We're building the ingress routes, the HH-60, and the pararescuemen are getting their work. We have moved airborne battle manager over the top. We are doing the airborne C2. We have a C-CAT [Critical Care Air Transport Team] that's jumping onto a C-17. They are already launching. Think about that. Air, land, sea, space, cyber, all domains, multidomain, multimission, all coming together to save one life. This is actually natural for us.



B-52 Stratofortress during annual Cope North Exercise, February 22, 2011 (U.S. Air Force/Angelita M. Lawrence)

**JFQ:** *Let's discuss the retirement plans for the A-10 and how that relates to your perspective of how close air support will look in the future. Related to this is the F-35 and how you are trying to leave the A-10, at least to some extent, to be able to have personnel to support the F-35 mission. How do you see this playing out during your term?*

**General Goldfein:** First, I look forward to a time where I'm not having as many discussions about platforms, and I'm actually having far more meaningful discussions about mission, and how we accomplish that mission. We have evolved to the point where there is no silver bullet in any of the domains, so it's not the F-35, it's not the A-10, it's not this or that. It is how these things come together.

Here's the example I would use. As a CFACC, understanding the ground force commander's scheme and maneuver, terrain challenges, battle lines, and what he was trying to accomplish, we divided

Afghanistan into regional commands [RCs]: RC-East, RC-South, RC-West, RC-North. These commands had different terrains, different schemes and maneuver, and somewhat different objectives based on where the battle was at the time. Each ground force commander required coverage that brought different attributes. So, again, my job was to look at the family of systems and make sure that those attributes were overhead and that the ground force commander was covered.

In RC-East, there was mountainous terrain and generally the worst weather. That was a place where I needed to have something that could get into the valleys and provide the precision fires that were required, and when things went bad, they went bad in a hurry. I needed to have something that could get there quickly. So quite frankly, MQ-9s were a great asset to place there. RC-South was generally flat, with a lot of agriculture and a lot of challenges around Kandahar and

other areas. A-10s worked well when we had them at Kandahar. When I needed to get something in RC-North, I needed something that could get there and could stay there for a while. That's where B-1s tended to park. And then in RC-West, it was a different battle line. In the *same* mission, there were four different platforms, each that brought the attributes the ground force commander wanted.

**JFQ:** *Given the expansion of domains to include land, sea, air, space, and cyber, what is the Air Force doing to make sure it provides a total force capability across all these domains?*

**General Goldfein:** We already are engaged in all of them. It goes back to the "always there"—take a look at all the missions, whether deployed-in-place or deployed forward. You would be hard-pressed to find a mission that we're not engaged in. It's always a balancing act

against a finite number of resources. We must balance not only capability and capacity but also force readiness to ensure we are able to contribute to all those mission areas.

You mentioned total force. One of the great gifts of Mark Welsh is the fact that we are truly one Air Force with three components and five core missions. But how do we reinforce that we truly are *one* Air Force with three components? You can't tell us apart. Each component brings unique attributes. Whether we are looking at squadrons, or how we develop joint leaders in the future, or how we look at multidomain command and control and the network approach to warfare, we have to look through the lens of one total force. When we place talent in all mission areas, how do we get the most return on our investment? The story of the Air Force is this: As we have gotten smaller over the years and made a conscious decision to trade capacity and readiness for capability and modernization, there were mission areas that grew, some of them exponentially, such as ISR.

Space has become a more contested place. Cyber. Nukes. All these areas. The budget numbers are coming down and the missions are getting bigger, so how do we pay that bill? We pay through some of our key enabling support, infrastructure, people, and conventional airpower. The problem is that we have gotten to the point where we are far too big of an Air Force for the resources that we have been given, and far too small for what the Nation and the joint force requires. In between those two bookends lives risk on the backs of our Airmen. That's why you're hearing me coming out to talk about the fact that this Air Force needs to grow.

*JFQ: I would like to hear you talk about joint leadership and how that is built. How do we step beyond the three-star level for jointness and leadership? How do we get an Airman to become a joint force commander?*

**General Goldfein:** I started off by telling you I think we do a pretty good job right now. Again, I'm not thinking we



Senior Airman of 932<sup>nd</sup> Aeromedical Evacuation Squadron participates in Exercise Global Medic 2011, a joint field training exercise for theater aeromedical evacuation system and ground medical components (DOD/Carolyn Erfe)

have to go fix things. The words that we chose in each of my focus series is important, strengthening joint leaders and teams. I'll give you four names, and you can use this list to describe how the Air Force is doing just fine: Lori Robinson, Paul Selva, John Hyten, and Darren McDew. I don't think we could find better leaders on the planet than those

four. The Air Force is not building joint leaders; they are evidence that we are building *great* joint leaders.

The question for me is how do we strengthen that? I believe the Airmen of the future are working to provide the voices in building a joint plan, so there ought to be an assumption that they understand the operational integration



Airmen assigned to 23<sup>rd</sup> Special Tactics Squadron at Hurlburt Field, Florida, use MH-47 Chinook to conduct overt and covert infiltration, exfiltration, air assault, resupply and sling-load operations in wide range of environmental conditions (U.S. Air Force/Christopher Callaway)

of air, space, and cyber. We're going to do a complete scrub that goes from entry level, for example, in the [Air Force] Academy, ROTC, or BMT [Basic Military Training], through the life cycles of Airmen to look at where they are and how are we exposing them to the operational art of air, space, and cyber. I'll be honest with you, the first time I truly had to understand space—not be a user of space, but understand space as an Airman—was being the Space Coordinating Authority as the CFACC. That was a little bit late. The first time I truly had to understand the operational art, operations in the cyber domain, was a little bit late. Where I want to focus on strengthening joint leaders in the Air Force is first and foremost that Airmen are exposed to the operational art earlier in their careers, earlier and more often.

The expectation ought to be that when we sit down at the table, we can speak air, space, and cyber with authority

and credibility because we understand it. That goes to career path progression. How long are we staying within stovepipes versus migrating across the air, space, and cyber domains and making sure we understand it? How much time do you have in a career to be able to get that kind of experience? We are going to look at all the curricula at the university, the Academy, and other places.

*JFQ: What have we not talked about that you would like to talk about?*

**General Goldfein:** Perhaps it would be helpful if I give you a little perspective on why I picked the three areas I focused on and how they tie together. There is actually a method behind the madness: When we connect the dots, and they actually equal joint warfighting excellence, that's where I intend to stay focused for my tenure as chief.

I only know one thing with absolute clarity, and I believe I only have one moral obligation as a chief. My moral obligation is that I ought never to allow an Airman to be sent forward to do a mission in harm's way without being properly organized, trained, and equipped. That's a moral obligation. The one area that I want to make sure that we stay focused on is our contribution as an air component as a member of the joint team for the joint force.

Then there are four elements to this. There is an organizational element, a leader development element, a CONOPS element, and a technological element. The three focus areas actually cover those four, so we have the organizational piece and the squadrons, leader development piece, as well as strengthening joint leaders and teams. CONOPS are associated with the ECCT. How do we take the sensing grid and combine it with the effects grid and pull it together in the way

we discussed? The technological aspect is really that whole piece of the network. How do we change the mindset on where we focus with future acquisitions?

*JFQ: How do you feel the Air Force is doing readiness-wise?*

**General Goldfein:** If you want to find high morale, go where we have high readiness. You want to go find low morale? Look where we have low readiness. The two are inextricably linked. We generate high readiness forward—pretty high morale on the Korean Peninsula and pretty high morale in the Middle East, relatively speaking. That’s where we generate and send supervisory capability, parts, readiness.

I will tell you that if pilots don’t fly, air traffic controllers don’t control, air battle managers don’t manage, maintainers don’t maintain—if we can’t affect their quality of service where they feel like they can be the most competitive they can be regarding career path and combat capability—then there is not enough money in the Treasury to keep them in the Air Force. When I look at all the things that build readiness and I look at where we are as an Air Force right now, my number one focus is people. If I’m going to generate the airpower the Nation requires and deserves, I have to have more people.

*JFQ: As we wrap up, one thing that may be useful to discuss is your take on “ready for what?”—not to overgeneralize readiness or lack of readiness across the force.*

**General Goldfein:** There are a lot of reasons readiness is complex. For instance, think about what I just talked about in terms of readiness of the force that deploys in place. How do we accurately describe the readiness of the space force, which is absolutely critical? How do we describe the readiness of the cyber force or the ISR force?

When I’m asked, what do you say to readiness, I think you have to rephrase the question: “ready for what and when?” If you were to ask, can you sustain that

ops [operations] tempo, and if the answer is, that is the steady state and it’s all I have to be ready for, then yes, I can. I will continue to pull from stateside units, and I will continue to have readiness in those units that are not next to deploy, but I can sustain that level of readiness.

But if you ask, are you prepared to simultaneously provide two-thirds of the strategic deterrence and most of the NC-3 [nuclear command, control, and communications], that is, do those things from a deployed-in-place that defend the homeland, contribute to the 4+1, continue the fight against extremism as the lead striking force in that operation, and take on any other contingency, I will tell you that we will be challenged.

*JFQ: You have to start making serious choices.*

**General Goldfein:** That’s right. That is why “ready for what and when” is such an important part of the dialogue, or you end up with a partial answer to a partial question.

*JFQ: Chief, thank you so very much for your time. This has really been a pleasure.*

**General Goldfein:** Thanks, yes, great seeing you. JFQ

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