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HEARING

ON

NATIONAL DEFENSE AUTHORIZATION ACT
FOR FISCAL YEAR 2017

AND

OVERSIGHT OF PREVIOUSLY AUTHORIZED
PROGRAMS

BEFORE THE

COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES
ONE HUNDRED FOURTEENTH CONGRESS

SECOND SESSION

SUBCOMMITTEE ON READINESS HEARING

ON

**DEPARTMENT OF THE AIR FORCE 2017
BUDGET REQUEST AND READINESS**

HEARING HELD
FEBRUARY 12, 2016



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**DEPARTMENT OF THE AIR FORCE 2017 BUDGET
REQUEST AND READINESS POSTURE**

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
SUBCOMMITTEE ON READINESS,
Washington, DC, Friday, February 12, 2016.

The subcommittee met, pursuant to call, at 8:04 a.m., in room 2118, Rayburn House Office Building, Hon. Robert J. Wittman (chairman of the subcommittee) presiding.

OPENING STATEMENT OF HON. ROBERT J. WITTMAN, A REPRESENTATIVE FROM VIRGINIA, CHAIRMAN, SUBCOMMITTEE ON READINESS

Mr. WITTMAN. Good morning. I want to call to order the Subcommittee on Readiness of the House Armed Services Committee. I want to welcome everybody this morning. I thank our witnesses for joining us.

Before we begin, I would like to recognize a number of our great young airmen that are here from Langley Air Force Base. I want to welcome you here to Washington. We appreciate all the Langley Air Force Association does. We have got a great working relationship there, as well as the Langley Civic Association.

Taylor, thanks so much for your leadership there, and we appreciate that.

I know that I have to compete with Ms. Bordallo, so Ms. Bordallo, is there anybody here from Andersen Air Force Base?

Ms. BORDALLO. Is there?

Mr. WITTMAN. We have had a little competition going. Wherever we go, there is always somebody there from Guam, so I want to make sure that we had the opportunity to recognize them here this morning, but—yes, yes.

Ms. BORDALLO. Would you kindly stand up, please?

Mr. WITTMAN. I knew it. I knew it. I knew it. She always does. She always does.

Well, good morning. I want to thank all of you for being here for our Readiness hearing on the “Department of the Air Force 2017 Budget Request and Readiness Posture.” This is the first of four hearings on the services’ budget request and readiness postures. And, in December and January, the services testified on increased readiness risks due to reduced installation investments. And, today, I look forward to hearing how the Air Force budget request enables a readiness recovery plan in where we continue to take risk.

I would like to welcome all of our members and distinguished panel of Air Force experts. This morning, we have with us General

David Goldfein, U.S. Air Force, Vice Chief of Staff; Lieutenant General John Raymond, U.S. Air Force, Deputy Chief of Staff for Operations; Lieutenant General John Cooper, U.S. Air Force, Deputy Chief of Staff for Logistics, Engineering, and Force Protection.

Thank you all for testifying today, and we look forward to your thoughts and insights on these important issues. And the purpose of this hearing is for the committee to receive clarification on Air Force choices for its budget request; to address funding priorities and mitigation strategies; and to gather more detail on the current and future impacts of these decisions on operations and training.

Once again, I want to thank our witnesses for participating in our hearing this morning. I look forward to discussing these important topics. And now I would like to turn to our ranking member, Madeleine Bordallo, for any remarks that she may have.

[The prepared statement of Mr. Wittman can be found in the Appendix on page 31.]

STATEMENT OF HON. MADELEINE Z. BORDALLO, A DELEGATE FROM GUAM, RANKING MEMBER, SUBCOMMITTEE ON READINESS

Ms. BORDALLO. Thank you very much, Mr. Chairman.

And, first, I would like to thank the witnesses.

General Goldfein, nice to see you again.

General Raymond and General Cooper and, of course, all the airmen that are here and committee people, good morning.

I have no doubt that your testimony before our subcommittee this morning will prove insightful, and I thank all of you for your service to our Nation. The Air Force has been engaged in constant combat operations overseas for a quarter of a century while conducting global transport and mobile operations, and we know—we do know—that this has taken a toll on both our airmen and their equipment.

You are accomplishing this feat today with a force that has considerably fewer personnel and aircraft than it did 25 years ago. Our forces continue to be deployed throughout the world, countering threats ranging from terrorist organizations to near-peer adversaries. The requirements placed upon the Air Force and our military as a whole can never be understated.

Because of unreliable and unpredictable funding resulting from sequestration and numerous continuing resolutions over the past several years, you have had to maintain a delicate balance between readiness and modernization. At times, this balance has cost readiness, and the further we get behind this curve, the harder it will be for our force to recover to full-spectrum readiness.

Through our discussion today, I hope that we can gain a better understanding of the Air Force's plan to maintain readiness through personnel, training, and infrastructure improvement. So, again, thank you all for your service, and I look forward to your hearing.

And I yield back, Mr. Chairman.

Mr. WITTMAN. Thank you so much.

I am going to go now to General Goldfein. I understand that you will be providing the statement for the panel.

I just want to remind our panel members, too, that all of your statements will be entered into the record, so we will have that, and if you would like to add anything, we can do that through the questioning period.

So General Goldfein.

STATEMENT OF GEN DAVID L. GOLDFEIN, USAF, VICE CHIEF OF STAFF, U.S. AIR FORCE; ACCOMPANIED BY LT GEN JOHN W. RAYMOND, USAF, DEPUTY CHIEF OF STAFF FOR OPERATIONS, AND LT GEN JOHN COOPER, USAF, DEPUTY CHIEF OF STAFF FOR LOGISTICS, ENGINEERING, AND FORCE PROTECTION

General GOLDFEIN. Thank you, Chairman Wittman, Ranking Member Bordallo, and distinguished members of the subcommittee. On behalf of our Air Force Secretary, and Chief of Staff, it is an honor to be with you today and a privilege to sit beside these two great airmen and in front of these incredible airmen. Together, we are honored to represent the 660,000 total force airmen serving today, and we request that our written statement be placed in the record.

A little over 25 years ago, then Captain Dave Goldfein piloted an F-16 fighter on my first sortie in the opening hours of Operation Desert Storm. During the 100-hour ground war that followed the air campaign, the Air Force, along with our fellow joint and coalition partners, provided the same blanket of airpower that had shielded U.S. forces since April of 1953, the last time an American service member was killed by enemy aircraft.

In addition to providing top cover, America's airmen defended the base perimeter, refueled and maintained aircraft, controlled air traffic, managed supply lines, tended to our wounded, air dropped humanitarian aid, and supported the joint team with global vigilance, reach, and power. To many Americans and to others across the globe, Operation Desert Storm set the standard for American airpower, and it is what they remember.

In the quarter century since Desert Storm, your Air Force has remained engaged in combat operations without respite. As we sit here today, airmen are standing watch over our nuclear enterprise, and they are conducting the lion's share of strike, air refueling, and intelligence, surveillance, and reconnaissance sorties over Iraq and Syria.

However, 25 years of continuous combat operations, coupled with budget instability and lower than planned top lines, have made the Air Force one of the smallest, oldest, and least ready forces in its history. To put our relative size, age, and readiness in perspective, in 1991, we deployed 33 of our 134 combat-coded Active, Guard, and Reserve fighter squadrons in support of Operation Desert Storm. We were 946,000 airmen strong. The average age of our aircraft was 17 years, and 80 percent of the fighter force was ready for full-spectrum conflict.

In contrast, today, we have just 55 total force fighter squadrons and approximately 660,000 total force airmen. The average age of our aircraft is 27 years, and less than 50 percent of our combat Air Force is ready for full-spectrum conflict. Couple this significant readiness reduction with a rising China; Russian aggression in

Eastern Europe and Syria; Iranian malign influence in the Middle East; North Korean nuclear and space ambitions; and our ongoing fight to degrade and ultimately destroy ISIL [Islamic State of Iraq and the Levant], and you have an Air Force that is too small, too old, and less ready for what the Nation requires.

Simply put, if we are to remain the most lethal and effective air, space, and cyberspace force on the planet, we must take steps to rebuild our readiness now. In order to accomplish this goal, the fiscal year 2017 budget aims to build, train, and equip an Air Force capable of responding to today's and tomorrow's threats. It balances capability, capacity, and readiness in support of our five core missions: air and space superiority; intelligence, surveillance, and reconnaissance [ISR]; rapid global mobility; global strike; and command and control.

Our number one priority is our nuclear mission, and our budget reflects this importance, including investments in ICBMs [intercontinental ballistic missiles]; command, control, and communications; as well as B-2 and B-52 bomber modifications. The F-35, KC-46, and LRS-B will change the calculus of any potential adversary and will be critical to success in any future high-end fight.

For an Air Force, failing to push the technological edge equals failure, and when the Air Force fails, the joint team fails. Our fiscal year 2017 budget request includes the funding required to recover the manpower needed to ensure the health of our nuclear forces, aircraft maintenance teams, battlefield airmen, and other critically undermanned and overtasked career fields. This budget marks the return of a committed investment to global vigilance, global reach, and global power for America.

A return to BCA [Budget Control Act] level funding in fiscal year 2018 will further decimate our readiness and modernization and will place the Nation at unacceptable risk.

Mr. Chairman, decisive air, space, and cyberspace power and the ability to command and control these forces have become the oxygen the joint force breathes and are fundamental to American security and joint operations.

The fiscal year 2017 President's budget and the flexibility to execute it, as we have recommended, is an investment in the Air Force our Nation needs. America expects it, commanders—combatant commanders require it, and with your support, our airmen will deliver it.

On behalf of our Secretary, our Chief of Staff, and the 660,000 Active, Guard, and Reserve airmen who give our service life, thank you for your tireless support, and we look forward to your questions.

[The prepared statement of General Goldfein can be found in the Appendix on page 32.]

Mr. WITTMAN. General Goldfein, thank you so much. Thanks for your testimony, and thanks for your commitment, as well as all the other airmen in getting our Air Force back to where it needs to be.

I want to ask, in that context, where we are in restoring readiness. We know that the rebuilding point for readiness is set for the Air Force essentially at fiscal year 2020. So if you can give us some perspective on, staying on that glide path and based on what the budget request is this year and the resetting, beginning as a bench-

mark in 2020, how far are we going to be able to go in restoring Air Force readiness? And give us some ideas of the timeframes.

And, along the way, obviously, you are going to have to make some tough decisions about risk. Tell us what core functions you will have to make some tough decisions about where risk will be placed in this readiness recovery effort.

General GOLDFEIN. Thank you, sir. So we have stated previously that our readiness recovery plan is dependent on a couple of key variables. The most important is a reduction in deploy-to-dwell time, which actually allows us to have the time to do the training that we need for high-end conflict. That is something, quite frankly, that we really can't control, given the global situation. And while we are incredibly proud of the fact that airpower is a requirement in all of the contingencies that we face, both current and potentially in the future, it has resulted in a demand signal that has reduced our ability to do the high-end training we need.

So while we testified previously that we believed that we would be able to achieve full-spectrum readiness on a given date, it is actually a rolling timeframe, and as our Chief and Secretary have testified, it is about an 8- to 10-year timeframe when we actually get the conditions set to be able to rebuild that readiness.

So we—and the last time we testified and we said 2025 was about what we were targeting, that was based on some assumptions that haven't panned out.

Mr. WITTMAN. Right.

General GOLDFEIN. Some of those assumptions were that we wouldn't be increasing our activity in the Pacific, that we wouldn't be increasing our activity in Europe, and that we wouldn't be increasing the activity that we are now seeing in Iraq and Syria.

So as long as that activity continues and that demand signal is there, what you will see from us is a continual rolling 8- to 10-year cycle to get to full-spectrum readiness.

Our prediction right now is that for the next 2 to 3 years, we will probably just be able to hold our own in terms of our current state of readiness, and as the Chief and Secretary have testified, where we currently sit and where I mention in my opening statement is we are approximately 50 percent ready across the total force for full-spectrum conflict.

Mr. WITTMAN. Does your 2017 budget request, does that reflect maintaining the necessary effort in core functions going forward? And, secondly, does 2017 budget, does that help you in setting the conditions for restoring readiness? And if not, where are the shortfalls or the things that we need to consider as we develop the policy to lay the framework for appropriations?

General GOLDFEIN. Thank you, sir. So when we submitted this budget, we worked to get the best balance we could, given the top line we received, between capability, capacity, and readiness. And so what you will see in the readiness accounts is that we actually funded our readiness accounts to the capacity that we can generate.

And so that, with the addition of OCO [overseas contingency operations] funding on top, we are actually able to fly to the capacity that we can generate. You had asked before about the core functions or about, you know, where we are taking the greatest risk.

The two core functions of our five where I believe we have the greatest risk are in air and space superiority and global strike. And the reason for that is that is where we have to train to the high-end fight against a peer adversary, and that is where we are just not getting the down time to be able to train to that level.

So when we talk about the combat Air Forces and we talk about gaining and maintaining air superiority, that requires training at a very high level against sophisticated adversaries and their capabilities, and that is where we are struggling to be able to find the time to do that.

Mr. WITTMAN. Thank you.

Thank you, General Goldfein.

I am going to go now to Ms. Bordallo.

Ms. BORDALLO. Thank you very much, Mr. Chairman.

General, the Air Force is facing a modernization bubble with several major projects competing for budget space as evidenced by the F-35 procurement decrease this year and over the coming years.

What is the one thing that Congress can do to improve Air Force readiness while addressing the modernization changes?

General GOLDFEIN. Yes, ma'am. So, first, let me tell you that you will hear a consistent answer from me in terms of what Congress can do, and that is, repeal BCA, because when we go back and take a look at what happened to your United States Air Force in 2013, when we were sequestered, it devastated our readiness, and quite frankly, we are still recovering.

So now I want to take a look at the budget that we have submitted. We did have to make some strategic trades between modernization and readiness, and like I said, first of all, we funded to our capacity, our current capacity in the readiness accounts, but to do that, we had to take some risk in modernization that we did not want to do. Deferring F-35 procurement, deferring C-130 procurement, pushing to the right, you know, modernization of our fourth-generation aircraft—all required for that high-end fight—are all risk trades that we had to make to be able to keep our readiness accounts at capacity.

Ms. BORDALLO. Thank you. Another question I have. The Air Force has been a leader in advocating the total force concept, integrating the Active and the Reserve Components.

General, what opportunities do you see in this and future years for leveraging the cost-saving nature of the National Guard to contribute to increase readiness, and where can Congress play a role in facilitating these engagements?

General GOLDFEIN. Thanks, ma'am, for an opportunity to showcase our Guard and Reserve. You know, we are one force, one Air Force, and all three components are actively participating. As the former Air Component Commander for Central Command, I travelled around the region, as you might imagine. And it never ceased to amaze when I would go up in the cockpit of a C-17 and one of the questions I would ask is: Okay, which one of you is Active? Which one of you is Guard? And which one of you is Reserve? And I would often have all three in the same cockpit performing that mission. That just gives you one vignette of just how closely integrated we are across the force.

So where we continue to look for opportunity is where we can leverage, very often, the higher experience level and the stability in the Guard force, in our Reserve force as we look to continue to associate in ways that can bring more and more capability to the fight.

The Secretary, in her testimony previously this week, made a comment that one of the activities we are looking at is how do we take the large number of Active Duty service codes that are out there and start combining them to make it easier for folks to come into the Guard, Active, Reserve and be able to transition between those components so that we can actually leverage the most that we can from the individual components.

I will just give you one quick vignette. So our Chief Master Sergeant of the Air Force came back from a visit to Lewis-McChord up in Washington, and he noticed a young senior airman driving to work in a Tesla, and so he pulled the airman over aside and said, “Okay, you know, talk to me, how is this?”

And he said, “Well, sir, I’m actually in the Air National Guard, but when I am not in the Air National Guard, I am the director of security for a Fortune 500 Silicon Valley tech company, but I also want to serve. And so when I’m not working security for this particular company, I am a senior airman, and I am doing cyber business for the United States Air Force.”

We want to make that easier, and so anything that Congress can do to help us to be able to make that continuum easier would be extremely helpful, and that is what we want to leverage.

Ms. BORDALLO. Thank you very much. And I have another one, final question for you, General, and I will also say that we, as Members of Congress, whenever we travel on our CODELs [congressional delegations], when it is a MILAIR [military airlift] operation, the Guard is there for us and doing a great job.

The budget request indicates that the Air Force will continue to take risk in facility sustainment, restoration, and modernization [FSRM]. What impacts will reduced FSRM spending have on our airmen’s day-to-day quality of life and activities?

General Cooper.

General COOPER. Congresswoman Bordallo, I would like to field that. The simple truth is: there is not enough money to go around. So we did—this budget request does take risk in our installations. That is really where we take the risk, at the expense of modernization and readiness. So the—what you will see as you dive into the budget is that we have constructed our installations around military construction and around FSRM, facility, sustainment, restoration, and modernization.

Based on the pause in 2013, we have to get at construction, so we focused—we put more money into our military construction, and we put less money into our restoration and modernization. We kept the same amount, roughly the same amount in sustainment because we have got to keep the buildings moving.

That does push us into a strategy of worst first. We have a backlog of like \$12 billion in facility restoration and modernization projects, so we are addressing the worst first. The worst first focuses around the mission, so, unfortunately, quality of life is com-

peting against mission requirements, and we are opting for our mission requirements.

So, internally, we are working processes on those core services to make sure our airmen can get the best we can give them, things like child development centers, things like gymnasiums and fitness centers and dining facilities. We are using transformational efforts to make sure that we can expand hours, provide those services so the airmen can conduct the mission.

But at the funding level we are at, we have to focus on modernization and readiness.

Ms. BORDALLO. Well, thank you, gentlemen, and thank you for your candid answers to our questions.

And I yield back, Mr. Chairman.

Mr. WITTMAN. Thank you, Ms. Bordallo.

We will know go to Mr. Scott.

Mr. SCOTT. Thank you, Mr. Chairman.

Gentlemen, thank you for being here and for your service, and I just wonder, is that plane still flying? What were you flying 25 years ago, and is that one still in the air?

General GOLDFEIN. I am being told it is now being used for an unmanned drone. I am hoping not.

Mr. SCOTT. But it probably still is in the air. It is something most people don't recognize is that while we had that many decades edge 25 years ago, the fact that we haven't recapitalized has given our adversaries an opportunity to maybe not catch us but get a lot closer to us.

I want to talk to you about the JSTARS [Joint Surveillance Targeting and Attack Radar System], which is an ISR platform that flies out of Warner Robins. Obviously, there is some money in the budget this year for it. There was more money last year for it. I am concerned about the reduction in that, but the recapitalization of the JSTARS fleet has continued to push a year here, a year there, and when I look at the charts that show what is going to happen with our current planes that are flying, when they go in for depot maintenance, we are going to end up with a capability gap that is going to force us to either keep very, very old planes, much older than the ones that you were flying 25 years ago, in the air or not be able to provide that—the moving target indicator and the battle management platform to the forces that need it on the ground.

The other aspect that I see is that the new system would save a tremendous amount of money on an annual basis. It is a new plane, much more efficient, can gather more data at one time, and I just don't understand why a program that uses existing mature technology that is relatively inexpensive compared to the other platforms that we talked about with regard to the recapitalization, has taken so long to deliver, and my question is, what are the plans for the capability gap that is going to exist when the current planes, which are many, many decades old, go in for depot maintenance if the new planes are not ready to go? And what plans would you have for accelerating the timeline to make sure that we don't have those capability gaps?

General GOLDFEIN. Thank you, sir. So when we went—when we were in—as we have been in discussions about JSTARS, part of the

discussion has been, do we shift to an unmanned versus a manned—large aircraft manned platform. We went out to the combatant commanders. The Chief of Staff of the Air Force went out to every combatant commander to revalidate individually the requirement for airborne battle management as a critical component of their war plans, and that was validated across all of the combatant commanders.

That is important because very often when we talk JSTARS, we start talking about the sensor, but I would argue that the most important thing that JSTARS brings is airborne battle management. As the Air Component Commander for Central Command, I will tell you that I use that platform in a number of ways, in addition to what is traditionally considered, you know, airborne battle management of the air-to-ground fight. I used it on the naval—in the maritime domain covering the Strait of Hormuz.

So, first and foremost, we have validated that airborne battle management is a critical requirement for the combatant commanders, and we need to move out on that. Now the challenge becomes a technology discussion, which is, at what point do we transition and can we transition this to an unmanned platform of the future versus a manned platform? And the reality is, is the technology that we would need to put on an unmanned platform doesn't currently exist to get the same capability that we provide to combatant commanders today. It is just not miniaturized enough. It just can't give the same level of fidelity of the ground moving target indicator that the JSTARS does today.

So the Air Force's position, for two reasons. One, we don't have the technology to put it on a manned platform, and two, airborne battle management is the critical requirement. We need to push forward with a manned airborne platform. We have the funding in this budget to do that.

But that dialogue has slowed us down. And then I will turn to General Cooper to talk about covering the gap in the middle.

General COOPER. Yes, sir. I mean, the JSTARS got its—it is an old airplane, 47-years-old, and we are having structural issues. And as you know, 50 percent of the airplanes are in depot, and the depot takes longer to keep them going, but that is emblematic of really our larger fleets, right, is we have to recapitalize our fleets.

We have a number of fleets that are almost as old as JSTARS, and we just have to keep on recapitalizing our fleets.

Mr. SCOTT. Well, thank you for that. The JSTARS fleet is a relatively small fleet, though, and the total cost for recapitalization is significantly less than it is for most of these other fleets, and it is—it seems to me that if we could push forward with an aggressive rapid acquisition process, that we could get newer planes, better technology that are going to save us money on an annual basis. And instead of spending so much money on depot maintenance for planes that we know we are going to pull out as soon as we have a new platform, why not push this thing up?

I mean, we are talking about—we are talking multibillions for a lot of platforms, hundreds of billions, and this is not one that costs anywhere close to what most of the platforms cost. And, as you said, it can't be done with any other platform, the battle management aspect of it, so thank you for your service and—

Mr. WITTMAN. Thank you, Mr. Scott.

We will now go to Mr. Courtney.

Mr. COURTNEY. Thank you, Mr. Chairman.

And thank you to the panel for being here this morning.

General, last year's NDAA [National Defense Authorization Act], we came up with a pretty good arrangement for the C-130 modernization with the new AMP 1 [Avionics Modernization Program] approach that hopefully is going to short-circuit some of the problems that existed before.

On page 14 of your testimony, you mention the C-130 modernization. I just wonder if you could just sort of talk about what is in the budget. I mean, it seems like a relatively small number for 2017, and 2020, as you know, is coming up fast for the global navigation requirements, so I was wondering if you could elaborate.

General GOLDFEIN. Yes, sir. Thank you. So we have broken up the AMP program into, as you know, two increments. So Increment 1, which actually makes us—makes the C-130 capable of flying in all the international airspace and meets FAA [Federal Aviation Administration] requirements. The previous budget, we actually had that completing in 2022. We were able to, in this budget, actually accelerate that to 2020, which allows us to actually be in line with the expectations for the FAA on being AMP 1 compliant by the timeframe they have given us. So that is first.

We have also been able to fully fund Increment 2, which actually does the physical upgrades to the C-130, and that will now complete in 2028. So we feel pretty good about the AMP program right now. We have actually—Chief of Staff has led an effort through our total force to talk to all of the States that have C-130s. All of the adjutant generals are part of this plan. When we work through the C-130 issues, we actually have that dialogue with them so they are part of the process. So, right now, going into this budget, we feel pretty good about the program.

Mr. COURTNEY. And, again, I am sure, you know, later in the process, we are going to have more conversations about this with you and your team. It is just—so is there any space or, you know, possibility that Congress can help in terms of accelerating it more or, you know, flexibility in the 2017 budget to help, again, push this along?

General GOLDFEIN. Sir, we will take that one to see if there is any kind [of] help we would require from Congress.

[The information referred to can be found in the Appendix on page 59.]

General GOLDFEIN. Right now, we feel like the program is pretty well funded for what industry can support. I will tell you where we could use your help, though, and that is, you know, we had to take some decisions—make some decisions to delay critical modernization to be able to pay readiness and get the balance in this budget.

One of the decisions we made was to defer some C-130J procurement, and so any help we could get to bring those back would be very much appreciated.

Mr. COURTNEY. Thank you very much, General, and again, to all the witnesses for your service.

I yield back.

Mr. WITTMAN. Thank you, Mr. Courtney.

We will now go to Mr. LoBiondo.

Mr. LOBIONDO. Thank you, Mr. Chairman.

I thank the panel, and thank you for your service.

For General Goldfein. General, in procurement line 22 of the aircraft procurement account for F-16 AESA [Active Electronically Scanned Array] radars, the Air Force requests and states an expedited delivery schedule. It is imperative to operationally field the AESA radar in support of homeland defense against evolving threats.

Can you please update the subcommittee on how the research, design, test, and evaluation as appropriated in last year's omnibus is progressing? What phase are you currently in? And how will this be completed? And when do you foresee an award coming?

General GOLDFEIN. Thank you, sir. As you know, we, the Department, originally pursued a joint urgent operational need, a JUON, from the supporting combatant commander, NORTHCOM command [U.S. Northern Command] in this case, to be able to procure the AESA radars for those F-16s that we use to do defense of the National Capital Region [NCR].

What a JUON does for us is allows us to actually go sole source, which speeds up the acquisition process. That JUON was not supported, so, therefore, we are now in a competition for those radars.

The Air Force fully funded 24 of those sets to be able to take care of those aircraft that are part of the NCR. But now what we will need to do and what we are pursuing is an acquisition strategy that allows competition for those 24, and the money has been laid in for that.

The remainder of the fleet will also be able to go into a full and open competition so that we can continue to modernize the remainder of the F-16 fleet with AESA radars, but we do have a strategy to get up to 24, although we are not able to go sole source at this time.

Mr. LOBIONDO. So you are attempting to expedite or—

General GOLDFEIN. Attempting to expedite, but we have to follow the acquisition rules for competition, but the money has been laid in for those 24.

Mr. LOBIONDO. I recently received word that the Ops 5 and 6 for the F-35 Air National Guard basing decision criteria, has been pushed back to later in the spring of 2016. Can you update the subcommittee on how that is progressing?

General GOLDFEIN. Yes, sir. So, as you know, we build our basing process so that we can be, you know, fully open and transparent with all of Congress to ensure that not only do you see the criteria but that you see how each base scores out in that criteria.

So what we are looking at right now with the F-35 Ops 5 and 6 is: What criteria now do we need to make sure that we have ready to go? As soon as that criteria is ready, we will then put that out, and then we will start the process that goes through not only setting the criteria but then actually then scoring a certain number of bases against that criteria, sharing with Congress how that scoring occurred, and then making the final decision that the Secretary makes in terms of what that basing will be.

Mr. LOBIONDO. Do you have any idea of timeline on that of when we are going to get to see any of that?

General GOLDFEIN. Let me see if we have all that. Sir, can we take that one, and we will get it back to you?

[The information referred to can be found in the Appendix on page 59.]

Mr. LOBIONDO. Sure. I, obviously, have a great interest in that. I like to think that I represent, if not the, one of the premier homeland security bases in the country because of our strategic location to New York and to Washington, and we think fair, objective, and transparent, we would score really well in that.

General GOLDFEIN. Yes, sir.

Mr. LOBIONDO. Okay.

General GOLDFEIN. And we will try to get that answer to you, I think, even before this hearing ends, if we can.

Mr. LOBIONDO. Okay.

Thank you, Mr. Chairman. I yield back.

Mr. WITTMAN. Thank you, Mr. LoBiondo.

We will now go to Mr. Peters.

Mr. PETERS. Thank you, Mr. Chairman.

And thank you, gentlemen, for being here. I wanted you to expand on training a little bit in two respects. One is, I would like you to explain why it is that a delay in the annual budget for—or diminishment in the annual budget for training lasts beyond the year. I think people don't often understand that there is a permanent effect to underfunding training year to year. I also wanted you to address sort of your sense of how—what—any additional challenges for the training budget are posed by the addition of new airframes like the F-35.

General GOLDFEIN. Thank you, sir. So, first, on the delay and the lag effect that goes into training. So the way we do our flying hour program is we budget in 2-year cycles, as you know, sir. And so we project in the future how much we think we are going to fly in contingency flying, and given the capacity of any weapons system—take the F-16 and Block 50 as an example, that is designed for suppression of enemy air defenses, so very high-end fight-centered focused community. So we look at all of the capabilities in that way to—in our weapons system to produce flying hours, and that is a fixed capacity. And then we project how much of that we think in that weapons system will be flown down range, and that becomes part of what we call the OCO.

And so what—you can't go up because that is the fixed capacity of the weapons system, so the only thing that can happen with that is that you project—what you project doesn't pan out and the assumptions change. And what we found year after year is that we actually fly more down range activity than we have left for home station training.

So what that means in the Block 50 F-16, for instance, is that air crew that are supposedly—that are trained and designed to do high-end peer-to-peer conflict in a contested environment are actually focusing more and more of their training on the lower end close air support violence extremist fight. So they lose their skills over time, and you can't build those back immediately because you have got to build them back so that they can be in a—that community, they have to be wingmen. They have to be flight leads. They have to be instructors. They have to be certified for all of those.

The less amount you have to train to that high-end fight, the less readiness that you have, so it actually takes you more and more time to actually build that back.

When it comes to bringing the F-35 and other weapons systems, the challenge for us and both the challenge and the asymmetric opportunity is that we approach joint warfare from a networked perspective. And the vignette I would share with you is, you know, I flew the F-117 as the last pilot, and when I took off and flew the F-117—first-generation, low-observable [LO]—it was a very closed system approach to using LO. I mean, I actually had a switch that would turn everything off, you know, all of the sensors would stow, and I would, you know, lower my seat and go to work.

In the F-35, when you power up the aircraft, it starts doing machine-to-machine collaboration and discussion on the initial power up, and it starts comparing amongst it, in the network, and it is talking through air, space, cyber. It is doing the full-spectrum look, and it is doing a human-machine collaboration that actually places symbology on the visor of that aircraft.

And so it is a very networked approach. So when we bring the F-35, the F-22 on, it is about the networked approach to warfare, and that makes it its own training challenge because we have got to be able to simulate that entire network and go to training as opposed to a single aircraft going out and training on a range.

Mr. PETERS. Just sort of—I know quantitatively, just how short are we, given that we have been lagging a little bit already?

General GOLDFEIN. So, as I testified earlier, we are at 50 percent or less in overall full-spectrum readiness across the Air Force, and that vignette I share with you in terms of the fact that we are not training at this level, that is exactly what that means, meaning that we are not able to train to the suppression of enemy air defenses mission because we are using that weapon so much in the fight against ISIL.

So, at 50 percent readiness, the challenge is, if you look at what our Secretary of Defense has laid out as the major strategic challenges that we face, China, Russia, Iran, North Korea, and a condition of violent extremism that we will likely have to deal with in the next decade, that covers the spectrum of the potential conflict that we may face. So if we, as an Air Force, are 50 percent ready, what we are saying is we are 50 percent ready against the higher end threats.

Mr. PETERS. And, General, I just want you to know that is something that has been on my mind since I have been on this subcommittee, and it is something that is not easily observed, and so I wanted to take a little time to draw it out. I appreciate the emphasis on it, and I hope we can be responsive. Thank you again for your testimony and your service.

I yield back.

Mr. WITTMAN. Thank you, Mr. Peters.

We will now go to Mr. Bishop.

Mr. BISHOP. Thank you.

General, I appreciate the opportunity of being here.

Mr. Wittman, I appreciate you having a hearing at 8 a.m. in the morning. I realize you think there are no other issues that conflict

with that. There is one. It is called my mattress. I wish you would get one that is comfortable for you so we wouldn't be doing this.

And, General, can I also just—before I ask a question, just say one thing. Your complaints about the BCA are spot-on accurate, but it is too narrow. There were four other cuts in addition to that, as well as the 25 years of constant combat flights you had to do. You add all those things together. So when you have the criticisms, don't just narrow it to that one aspect. There are other things that have screwed you up in addition to that, much broader than that.

Can I ask you a question, though? You did mention in the written testimony about Hill, which is important to me for obvious reasons. I do have some concern over the transition that is going forward, especially as we look in what is going in the future.

Is there any concern—because the 388th is a combined unit—is there any concern you have with the Reserve unit there? Are they going to be tasked more or less in the future?

General.

General RAYMOND. Thank you.

Congressman Bishop, thanks for the question. The Reserve Component at Hill, like all of our Reserve Components, is critical to our force and great, great partners. We do have a transition plan. Those F-16s will be transitioning in the 2018 timeframe, and what we have done in the—to fund that transition is to put some funding in to make sure that those aircraft can be flown while we are waiting for the transition.

Mr. BISHOP. But the maintainers are still going to be a problem that has to be dealt with.

General.

General COOPER. If I can field that, Congressman Bishop.

Yes, maintainers are a problem in our Air Force. We have taken great steps to make sure that we are going to transition well to IOC [initial operating capability] for F-35, but I am concerned on any F-35 beddowns after IOC. We are 4,000 maintainers short in our Air Force. We are focusing on Hill right now to make sure that we can get the maintainers for IOC, so, right now, at Hill specific, we moved—as you know, the 4th Fighter Squadron came back recently. We moved those maintainers over to begin training for F-35, and we received—we have six airplanes there. I will be out there next week making sure we get IOC right.

And then we are—the Reserves are taking care of the F-16s. When the 421st Squadron comes back, the same will occur. Those maintainers will move over to F-35, and then the Reserves will manage the F-16s.

Mr. BISHOP. That still seems to indicate there is going to be a greater emphasis put on the Reserves taking more capacity.

General COOPER. Yes. The Reserves will—we are going to let the Reserves work on the—use those aircraft at Hill Air Force Base until transitions in the following years.

Mr. BISHOP. Can I transition just slightly and see if you can do this because I do have a concern about hiring practices? I wonder if the Air Force is going into that. I mean, some of them are taking up to 160 days just to hire people.

Is the Air Force looking at trying to devolve some of that authority, because once again, I think OPM's [Office of Personnel Man-

agement's] goal is like 80 days, which seems to be an outrageous goal, and if, indeed, you cannot hire those people, I understand you have to augment them with contractors which may—on the work lines—which may not necessarily be a cheaper way of doing it. So is the Air Force moving in something to try and deal with civilian hiring practices?

General GOLDFEIN. Yes, sir. As a matter of fact, our Secretary of the Air Force is leading that effort herself. She has tasked the—our A1, our Director of Personnel, to look at all of our policies across the Air Force relative to civilian personnel to see how we can speed up the process of hiring when we need to hire, especially for critical skill sets. She is also having us take a look at the continuum of service between the three components and allowing civilians to be able to come into the Air Force, especially where we need critical skills.

The challenge we have, Congressman, as you know, is that most of the rules associated with civilian actually don't reside within the service. Most of those are above the service.

So while we are looking at everything we can and why we are brushing all of our individual policies, it is really above us, and that is where we can probably use your help.

Mr. BISHOP. Thank you.

Well, we will try and do that as best we can, help out. I appreciate your comments about fourth-generation modifications have been delayed. You were very clear on how the readiness capacity or capabilities are being lost. I also have a—that is not even a question. I am just saying it once again.

I also have a concern of how it is affecting contracts, depot workloads, everything else. I have only got 20 seconds, so you don't need to respond to that, but thank you for your presence here. And, in an hour, I think I will be awake so I can understand what you actually said.

Mr. WITTMAN. Thank you, Mr. Bishop. We will make sure that when we have an opportunity, we convene at a later time.

Mr. BISHOP. And then we will talk Indian bills after that.

Mr. WITTMAN. Yes, we will. Yes, we will.

We will now go to Mr. O'Rourke.

Mr. O'ROURKE. Thank you, Mr. Chairman.

I wanted to ask, General, about the nuclear cruise missile part of this budget, and I will tell you my limited understanding and some of my concerns, which should take no more than a minute, and then offer you the remainder to answer.

My understanding is that this is a \$30 billion price tag for a weapon that will be carried on the aging B-52 platform. I want to know: What would happen should we not pursue this strategy? What is the risk to the United States? And, two, what are your thoughts on the British decision a few years back not to pursue this as a strategy because of their concern that it would produce miscalculation and unintended consequences? And it kind of departs from traditional nuclear deterrence, where each side has a good understanding of the other's capabilities and their conditions for using them.

And so if you would take the remaining 4 minutes to answer those concerns and tell us what would happen if we didn't do this and where we could apply those \$30 billion if we didn't.

General GOLDFEIN. Thank you, sir. Just to talk about just the funding part of it right now, just to be clear. So the long-range standoff weapon that will replace our air-launched cruise missile is currently scheduled to be integrated not only on the B-52 but also on the B-2.

So, for us, the way we look at this is it has to do with, you know, 21st century strategic deterrence and what the nuclear aspect of that is, and we, as an Air Force, we like to joke that we are responsible for three of the four legs, because if you add nuclear command and control, which we are responsible for, it is actually almost a leg in and of itself to ensure that we have assured communications.

So, for us, it is about: How do we ensure that we have a reliable, assured, secure nuclear deterrent to be able to hold targets at risk so that we can show that we have that capacity and capability? And so there are a number of ways you do that.

You do that through the bomber force. You do that through the, of course, the ground-based force, our Minuteman III, and then transition into ground—GBSD [Ground-Based Strategic Deterrence], and we also do that with the Navy, with our submarine force.

And so, for us, when you take a look at the long-range standoff missile, it is about being able to have the right standoff to be able to actually go in to be able to service targets that the Commander in Chief may ask us to service.

And so, when we look at it, we need to have both that capability, which is standoff, plus we need to have gravity capability, plus we need to have penetrating capability with gravity, which is why we are putting money into the B-61 as well, and we have to modernize the nuclear missile fields. And so that is why you see an increase of \$4.3 billion in this budget to be able to modernize the nuclear.

So what we would tell you is that we believe that is a critical component of the three legs of the triad.

In terms of, you know, risk that we would have, in terms of employment, you know, modernization of a particular weapons system does not actually indicate that you would have—you would be more susceptible to use. That is a—purely a Commander in Chief decision. So we would say, as the employers of the nuclear enterprise, that we don't think it increases risk.

So one of the areas that we are going to need help from Congress on is that if you take a look at the nuclear enterprise, most of it was billed in the 1940s and 1950s, and it is aging significantly, and we have some bills that are going to come due after this FYDP [Future Years Defense Program], in the 2022 timeframe, that are significant.

So we are working within the Department to look at all aspects of the nuclear enterprise to ensure that we are putting the best dollar forward to ensure that we have a safe, secure, reliable, nuclear deterrent for the 21st century that has all three legs plus the command and control intact.

Mr. O'ROURKE. So you do not share the British concern or the concern of former Defense Secretary Perry about the risk of mis-

calculation or unintended consequences. You think this is the wisest use of that \$30 billion.

General GOLDFEIN. Yes, sir, I do.

Mr. O'ROURKE. And if, for whatever reason, Congress were not to support that request, where would that—and still allow for that \$30 billion to be used within the Air Force, where would that money go?

General GOLDFEIN. Sir, you know, to be honest with you, what we would do is we would take a look first at our stewardship of the nuclear enterprise, and so the first place we would look is, where do we need to place that within the nuclear enterprise as our number one priority for our service.

After that, we would look at it like we look at everything else, which is we would look at a planning choice, you know, and we would look at the trades that we have to make between capability, capacity, and readiness, but I can assure you the first place we would look, it would be within the nuclear enterprise.

Mr. O'ROURKE. Thank you.

Mr. WITTMAN. Thank you, Mr. O'Rourke.

We will now go to Mr. Gibson.

Mr. GIBSON. Thanks, Mr. Chairman. I appreciate the panelists. Thank you for your service and your sacrifices and those of your family. My question has to do with joint interoperability, training, and readiness, and specifically with regard to the budget, if you could lay out where the commitments are in terms of Joint Forcible Entry exercise, how many commitments—how many rotations do you see this budget year, and then also commitments to the National Training Center [NTC] and the scope of that, and any other modeling and simulation for the year, if you can lay out where the budget is.

General GOLDFEIN. Thank you, sir. So, you know, 15 years of continuous combat has actually produced the most joint force in our history, and I can say that also personally, having been the Combined Forces Air Component Commander deployed for two of those years.

So what we found is that our forces—soldiers, sailors, airmen, marine—who are down range are not only training but executing jointly every day, and then when we come back at all of our major training venues, if you go out and take a look at Red Flag at Nellis, Green Flag at Nellis, Cyber Flag, NTC rotations, air warrior rotations, you will have a joint element of every one of our exercises, and the service chiefs and the “3s,” the Directors of Operation, work that hard every day.

You know, we are very proud of the fact that when it comes to training of the United States Army and their Joint Forcible Entry capability, when it comes to especially airborne, that we provide the lift that they require to do that mission. And so, working with, you know, General Abrams in Forces Command and working with not only our Army but also our Marine Corps and Special Forces, what we ensure is that we understand the requirement for a number of jumps that we have to support, and then we look across our enterprise at the global mobility to ensure we have the C-17s and the C-130s and the H-60s that are required to be able to support those jumps.

Mr. GIBSON. You know, I appreciate that. And, as you know, and I thank you so much for the incredible career you have had, you know, the whole piece of it comes together with electronic warfare, with fighters, bombers, and command and control. So, specifically, the question is: How many Joint Forcible Entry exercises are in the budget for this year?

General RAYMOND. We have really focused on putting resources to the training effort. In this program, the budget that was just submitted, we have over \$398 million going to CAF [Comprehensive Airman Fitness] readiness training, which are those exercises which you talked about. We invested over \$235 million into our training ranges to make sure that those ranges are high-end capable, fifth-generation capable, to get the most out of those training events.

We have also spent about \$345 million on live, virtual, and constructive training, looking at, how do you do that better in the simulator to, again, to maximize those—maximize those training events?

Mr. GIBSON. So thank you. It sort of—and it may very well be my failing in not framing the question right, but I will sort of lay out a few points.

You know, over the years, as we, you know, are working to sustain the joint piece of this, the forcible entry piece of this, we could have anywhere from 8, in some years 10, Joint Forcible Entry exercises. And, last I looked at it, I think we are down to about four a year. And I understand, I mean, the war has played a big role in that in terms of where the resources need to go, understandably.

But, you know, this is among the reasons why, gentlemen, I would say, I am concerned about the decision the Air Force has taken with regard to the 440th [Airlift Wing at Pope Field], and the reason is, is we are all managing risk. Up here, we are managing risk. The Air Force is certainly managing risk. All the joint forces are managing risk, but among the things that the 440th could do is really allow for smaller units in the XVIII Airborne Corps to sustain. As was mentioned, you have a—you take—justifiably you are proud of the fact that you do help the joint forces maintain their readiness. But it is especially difficult today, at the company and battalion level, to keep up on the eaches when it comes to their requirement knowing that the four major packages that we have, the Joint Forcible Entry exercise is important for exercising higher level staffs for integration, but it is getting tougher to, you know, the one-offs, the people who go to school and come back, and that was managed by the 440th actually being at Fort Bragg.

General GOLDFEIN. Sir, if I could just, very quickly, you know, our objective—and we are working this with the commander there, General Townsend, you know, we met with him regularly. Our objective is that when a soldier walks out to the flight line to get on a C-130 for a jump, he doesn't know that the 440th is gone, because what we have done is we put an aircraft there, and he gets the training he needs. That is the objective.

And so we do that for a number of bases around the world that do airborne and do training, and so we do that in Vicenza, in Italy, we do that across, so we think we have a good template for that.

The Army leadership agrees, and so if we get this right, it will be transparent to your soldiers.

Mr. GIBSON. My time is expired.

Thank you, Mr. Chairman.

Mr. WITTMAN. Thank you, Mr. Gibson.

We will now got to Ms. Gabbard.

Ms. GABBARD. Thank you, Mr. Chairman.

Good morning. You spoke a little bit earlier in your comments about the investment and the necessity of increasing cyber capabilities, and I am wondering if you can talk in a little bit more detail about two things, recruiting and retention. When we look at the talent that exists and the innovation and how quickly evolving this world is in the private sector, you know, what kind of creative efforts are you taking to be able to bring those folks in, to be able to work with us, as well as to retain them once they are there?

General GOLDFEIN. Yes, ma'am. Thank you. So we are working, quite frankly, very hard with an effort that the Secretary of Defense is leading called "Force of the Future," and one of the elements of that is permeability and allowing easier access to the ingenuity and innovation that is in the private sector and the public sector to come into the military when we need it and vice versa, right, also sharing what talent and expertise and capability we have with the private sector. So we continue to look at those capabilities. And, right now, as an Air Force, our contribution to the cyber force is 39 teams. It represents about 30 percent, as you might imagine. It is about right for our contribution, 39 teams. So CYBERCOM [U.S. Cyber Command] has laid out three key mission areas they are responsible for: defend the Nation, defend the networks, support the combatant commanders. We have 13 teams that we are building to support each of those requirements in each of those mission areas, so 13 times 3 equals 39, so that is where we get to. Right now, we sit at about 26 teams, and we are on track to complete our build of 39 by 2018. So we feel pretty good about where we are, where we are going. I will tell you that you can never stop looking at managing this talent because we have got to have the incentives in place for not only them to want to join us, out of more than just patriotism, but because we are a good place for them to reside because of how we take care of them and the value of their service, so those total force continuum measures that we are working on are going to be incredibly important.

General RAYMOND. Another thing, if I could add, we have done a review of the retention across the cyber force, and we are not seeing retention issues with the cyber force. The retention levels mirror the rest of the Air Force. They are about equal. As General Goldfein mentioned earlier about with the vignette of the airman driving the Tesla, I think people join the Air Force for a reason. They want to serve their country, protect their Nation, and right now, we are not seeing those readiness challenges.

Ms. GABBARD. That is great. Somewhat connected with that but really on the overall broader scale is, as you talk about the total force integrating the Guard and Reserves, how are you integrating those elements in your deployment-to-dwell ratio in a way that is sustainable for the future?

General RAYMOND. Thank you for the question. We are a completely integrated force. As General Goldfein mentioned earlier, you go look in a cockpit, and you won't be able to tell the difference. There will be Guard, Reserve, and Active Duty all blended together, and that is that way across our service. When you look at the readiness levels across the service, we mirror each other because we operate together. If you look at the deployed as well, the same concerns are there with the total force as it is with the Active Duty force. We about mirror each other in readiness levels, and we watch that very closely, but we are the most integrated service with our Guard and Reserve, and they are critical partners to us.

Ms. GABBARD. What is the deploy-to-dwell ratio now?

General RAYMOND. Across the board, on average, it is about 1:2.5.

Ms. GABBARD. Okay.

General GOLDFEIN. Ma'am, could I also offer that at some point you do get to a capacity stop. So, regardless of how integrated we are, we still only have 55 squadrons to do the Nation's work. So, at that point, you actually can't get any more out of what you have already got. So that is why I go back to the point that we are actually too small and you are seeing us trying to build back up the force size and our capacity to do what we believe the Nation needs.

Ms. GABBARD. Thank you.

Mr. WITTMAN. Thank you, Ms. Gabbard.

General Goldfein, in your testimony, when you spoke about the shortage on maintainers, I would like to get your perspective and a little more of a drill down as to the nature of that. And you talk about needing to use contract maintainers for your A-10s, F-16s, C-130s, in order to get people transferred over to spin up to maintain the F-35s. There seems to be another aspect to it, though, when you look at the nature of the shortage, and that is many of the shortages are occurring with your senior NCOs [noncommissioned officers] that are, indeed, your trainers for airmen coming in. Tell me: How do you address that, because that is a long-term issue? The short-term issue is contract maintainers, but the long-term issue is, as you bring new Air Force personnel in, how do you get them to stay in the Air Force so they can become that senior NCO that is a master maintainer but also the trainer for the new airmen that are coming into the Air Force? Tell me how you address that, because that wasn't related in your testimony.

General COOPER. Chairman, I would like to answer that. So we are 4,000 maintainers short across the Air Force, and the issue is we are bringing two F-35s in a month, and each F-35 requires 20 maintainers, so we add to that deficit every single month as we go forward. And, next year, it will be three F-35s. So we are addressing it fully on how can we grow our fleet. So what we have done to date is we balanced as much as we can safely do with our legacy fleets, even with our large airplanes, moving to fighters because it is most acute in the fighting Air Force, in our fighters. So we have moved like crew chiefs from C-130s, to F-35s. Congress authorized us to transfer up to 18 A-10s—36 A-10s to BIA [back-up inventory aircraft] status. We used 18 because we needed the capacity for the fighting force as well as the maintainers. We split the difference.

Moved the maintainers to F-35s, so we have done as best we can there.

We have offered numerous retention incentives to our older maintainers, our tech sergeants, and our master sergeants, our 7-levels, so they will stay in and retain that training expertise. And we have seen some growth there. Up to a thousand maintainers have taken the retention bonus and have stayed in, which is good. But we are digging a continual hole as we go forward because we have the force structure that we are not able to divest, and we are growing F-35s.

Internally, since 2013, we under-assessed our maintainers, so our new airmen coming in, it was a challenge. We had an \$8 billion challenge after sequestration going 2014 into 2015 on how to close that gap, and the first place that we went to, the easiest place to go to get dollars that quick that soon is the personnel account. So, unfortunately, we under-assessed in the maintenance. We are reversing that trend. We did it in 2015 at the expense of other critical AFSCs [Air Force specialty codes] and career fields in the Air Force. We are doing it in 2016 up to a thousand in fiscal year 2016 at the expense of critical career fields, not maintenance, in the Air Force, and this budget asks for a growth of maintainers in the 2017 budget. And part of that, an overall growth for the Air Force, a large part of that is maintenance.

The initiative we just started was looking at the contract maintenance in areas across the Air Force where there are not combat-coded units. They are mostly training units. They don't have a deployment requirement. And we feel that we can contract, if the market is right, we can contract in those locations, take those maintainers and move them to F-35s. But that is a challenge, that is just a short-term challenge, and we need to continue to grow, and really that only gets us about 2 years, and we will have the same problem in 2 years.

Mr. WITTMAN. It just seems like a cascading effect, especially across the MOSes [military occupational specialties] for your maintainers at every level of experience there.

General COOPER. It is. We are challenged in our, especially in our fighter fleets. We have six career fields that are below 1:2 dwell, meaning they are slightly at home slightly longer than they are deployed today on legacy.

General RAYMOND. I would just add that when we look at readiness and the impact of that, we have critical skills availability as a key piece of that readiness, and it is not just the numbers of people, but it is the right level of people, as you mentioned, Mr. Chairman. That is why it takes some time to grow that readiness. We have made that initial investment, and we bring new airmen into the Air Force, but it will take 5 years or so to grow those to a level where we have the senior leadership that we need to build that readiness back up.

Mr. WITTMAN. I just want to make sure that we reflect the proper policy so you can continue to grow both the capacity and the capability. It has to be grown on both levels. Let me ask a quick question about a comment that you made in your testimony about infrastructure and capacity and excess capacity. As you know, we look at that, there was a requirement from last year's NDAA for

each of the service branches to provide a report back to Congress concerning capacity issues, overcapacity, excess inventory, those kinds of things, as well as what we had hearings on earlier, and that is: What are we doing to support the existing critical infrastructure and facilities support, which is one of the elements of what we use to generate readiness?

One of the concerns I have going forward is to make sure that we don't get too shortsighted, because everything we have done recently has been very shortsighted. What do we do to make it to the next budget year? What do we do to move money around? And I understand the immediate need to try to generate some dollars and the dollars that come out for older facilities. And I think that there is a logical way and a risk way to do that. My concern is this: on the other side, too, the Air Force with its assets is going to continue to grow. We are going to have new fighter aircraft coming on board and new Long-Range Strategic Bomber, a new tanker fleet, that lift capacity that is there, even a few more C-17s, modernized C-130s. So there is a need for infrastructure to support that. So my concern going forward is saying: Well, let's reduce base structure or that infrastructure. We know we need that to generate readiness in the support aircraft as it comes on. I want to make sure that those two curves don't cross each other, and then we come back and say: Guess what, now we have more aircraft than we have facilities necessary to keep the aircraft and maintain them. So, in my idea, how do you find the right balance in saying we need a BRAC [Base Realignment and Closure] in light of saying we have got to be building more aircraft?

General GOLDFEIN. Sir, thanks. I will start, and then I am going to turn over to General Cooper to give you a little bit more detail on where we are with our infrastructure. A couple key points here. First, it will be no surprise to you that, as airmen, we project airpower from our bases, so they are actually part of our fighting platform. So when we actually talk about infrastructure, we are talking about part of how we fight, so it shouldn't be surprising that we are going to put a significant amount of resources against our infrastructure. In this budget, we made a strategic trade and a decision to emphasize combatant commander requirements and new mission beddown, KC-46, F-35, because as you stated, as you bring on new weapons systems, there are unique capabilities that you have to build to be able to bed those down. So you will see those two priorities.

As we have testified previously, you have also seen that we have taken risks in our facilities, restoration, modernization accounts to do that. So, as I transition to General Cooper, what I will tell you is that, right now, we are about 30 percent over in terms of the infrastructure versus our capacity. And so, right now, today, we would tell you that we are keeping a number of facilities on these large bases up and running because we are not going to tear them down, and we don't have the force structure to require us to use them, so we could use at least a reorganization to be able to get more rightsized. But we also look at that through the lens of where we are going to be in the future when we get these new missions on. Right? So when you take a look at the tanker trade, as you will see, we will actually build up to about 479 tankers before we actu-

ally start coming back down and sort of keep it balanced. So we think that 30 percent over capacity that we have now will actually continue to exist as we make the trades of the future. So let me turn it over to General Cooper.

General COOPER. Thank you, General.

Too much, too old, too expensive. I am on the business side of the Air Force, and I am responsible for trying to—and the readiness side, so we are trying to make sure that we have the appropriate readiness so we can give General Raymond and the three and the operations the most the Air Force can give America. Our infrastructure is too big. We know that. So, I mean, I have a litany of testimonials here. I mean, at Keesler Air Force Base where we train our pilots, we have a 50-plus-year-old drainage system which just gets rid of the water off the flight line that can't handle large rains. So about three times a year, it floods, and we can't conduct pilot training. So, last year, we lost 370 sorties because it rained. That facility project is still competing for funds because there are other more critical facility projects.

We avoid \$2.9 billion in expenses because of previous BRACs every year.

Mr. WITTMAN. Thank you, General Goldfein, General Cooper.

Ms. Bordallo.

Ms. BORDALLO. Thank you very much, Mr. Chairman.

I just have a couple of questions I would like to ask. The first is: To what extent are weapon shortages affecting prepositioned munition inventories and, consequently, readiness to address other potential conflicts around the globe?

General GOLDFEIN. Thanks ma'am. So, in this budget, what you will see is that we are actually funding munitions to the capacity that industry can produce. The challenge we face is that while we have the munitions we require for the current fight, it takes us upwards of 4 years to actually replenish the munition that we drop, just based on how we do a budget cycle and the timeframe it takes. As we drop more and more munitions, then what happens is—and by the way, as we have more and more allies and partners that join the coalition, who are also looking at the same preferred munitions, primarily Small Diameter Bomb, Hellfire, and JDAM [Joint Direct Attack Munition], are the three that we tend to be using in this fight, precision-guided all of them. What we do then to be able to keep the stocks we need for the current fight, is we do take the others around the globe down to a certain extent. Now, we have a plan to continue to replenish them, but there is a lag factor because of that 4-year period. So part of that readiness for contingencies in the high-end fight, if you were to have the PACOM [U.S. Pacific Command] commander here or the EUCOM [U.S. European Command] commander here, they would probably both tell you they are not satisfied with their current stock levels that we have had to deplete and towards to have what we need for the current fight.

In addition, when our allies and partners come to us and say, "Listen, we are part of this coalition, and we need your support with the munitions," and "oh, by the way, here is what we would really like to have, Hellfires, JDAMs, Small Diameter Bomb," that further exacerbates the challenge we have. So what we are working to do is to be able to work to project future expenditures based on

historical averages. We have been in this for 15 years. We think we can probably project about what we are going to drop 2 to 3 years from now, and then be able to shorten the cycle time to be able to replenish those munitions so we can keep our stocks high.

Ms. BORDALLO. Thank you. Thank you very much, General. I guess now is the \$64,000 question. If the current operational tempo were to increase, say budget constraints, sequestration, whatever else you have out there, what would be the real effect on the total Air Force and, of course, readiness, most importantly? I mean, I am talking like 2020, or whatever the case might be, if you could answer that, General.

General GOLDFEIN. Yes, ma'am. It will—as I said before, the one element that we can't control is demand and demand of the things that we look at to generate and sustain readiness levers, if you will. It is the demand signal that is actually keeping us from doing the high-end training. If that demand goes up with the capacity that we currently have, if we don't get bigger, if we don't bring these maintainers on, if we don't bring our capacity up, we will be less and less ready over time for the high-end fight. It goes to, again, if I can fly this many sorties, and that is all that I can generate, and I need this many sorties here to be able to generate full-spectrum readiness, and the reality is the Nation calls on me to do this, I am going to have less to do high-end training, and I am going to be less ready.

Ms. BORDALLO. Thank you very much.

Thank you, Mr. Chairman. I yield back.

Mr. WITTMAN. Thank you, Ms. Bordallo.

We will now go to Mr. Scott.

Mr. SCOTT. Thank you, Mr. Chairman. I will be brief about this.

I do want to go back to one of last points Ms. Bordallo made, and the munitions—that is hard for us south Georgia boys to say; we call it “ammo.” It doesn't matter what size it is; it is ammo. But our private sector partners that provide a lot of those things for us, when we are not able to give them consistency in their production, that creates a tremendous amount of turmoil on them, and in many cases, we have lost our partners in the private sector and ended up with sole source or in some cases having to go to other countries that, quite honestly, aren't friendly with us to do certain things.

I do want to encourage you to do one thing. The people on the committee, the Armed Services Committee, I think will support you regardless of what party they are in. If you look, historically, we have been able to work together on these issues. But I would ask that you expand and meet with Members that are not on the Armed Services Committee. This patch, if you will, that is going to temporarily stop the reduction in readiness from 50 percent on down, this is a patch, and that is all it is. And I think that Members who are not on the Armed Services Committee, who are not on Armed Services Appropriations, probably don't understand the current situation. And some of them are very anxious to cut spending no matter where those cuts come from. And my concern is not with any of the Members here or on this committee. My concern is with Members who have not had the opportunity to listen to people who we respect as much as we respect the three of you, so I

would encourage you to speak with all of the Members as well, and take somebody from their State.

General GOLDFEIN. Yes, sir. Thank you.

Mr. WITTMAN. Very good.

Thank you, Mr. Scott.

I think that completes our questioning.

Gentlemen, thank you so much for joining us. I want to thank not only you but all of your colleagues there, our airmen that have joined us today. A great opportunity to see how the process works. We appreciate your perspective. It is very important as we develop the policy this year, the National Defense Authorization Act, to make sure that we get it right, restore as much readiness as we can within this particular window.

So, gentlemen, thanks again for your service. We appreciate the sacrifice, too, of your families.

And our subcommittee is now hereby adjourned.

[Whereupon, at 9:19 a.m., the subcommittee was adjourned.]

A P P E N D I X

FEBRUARY 12, 2016

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

FEBRUARY 12, 2016

Statement of the Honorable Robert J. Wittman
Chairman, Readiness Subcommittee
“Department of the Air Force 2017 Budget Request and Readiness Posture”
February 12, 2016

Good morning. Thank you all for being here today for our Readiness hearing on the “Department of the Air Force 2017 Budget Request and Readiness Posture.” This is the first of four hearings on the services budget requests and readiness postures. In December and January, the services testified on increased readiness risks due to reduced installation investments. Today, I look forward to hearing how the Air Force’s budget request enables a readiness recovery plan and where we continue to take risks.

I would like to welcome all of our members and the distinguished panel of Air Force experts. This morning we have with us:

- General David Goldfein, USAF
Vice Chief of Staff
- Lieutenant General John Raymond, USAF
Deputy Chief of Staff for Operations
- Lieutenant General John Cooper, USAF
Deputy Chief of Staff for Logistics, Engineering, and Force Protection

Thank you all for testifying today and we look forward to your thoughts and insights on these important issues.

The purpose of this hearing is to clarify the Air Force’s choices for its budget requests, to address funding priorities and mitigation strategies, and to gather more detail on the current and future impacts of these decisions on operations and training.

Once again, I want to thank our witnesses for participating in our hearing this morning and I look forward to discussing these important topics.

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**DEPARTMENT OF THE AIR FORCE
PRESENTATION TO THE SUBCOMMITTEE
ON
READINESS
UNITED STATES HOUSE
OF REPRESENTATIVES**

**SUBJECT: DEPARTMENT OF THE AIR FORCE 2017 BUDGET REQUEST
AND READINESS POSTURE**

**STATEMENT OF: GENERAL DAVID L. GOLDFEIN
VICE CHIEF OF STAFF OF THE AIR FORCE**

FEBRUARY 12, 2016

**NOT FOR PUBLICATION UNTIL RELEASED
BY THE SUBCOMMITTEE ON READINESS
UNITED STATES HOUSE OF
REPRESENTATIVES**

INTRODUCTION

Today's national security challenges come from a combination of strong states that are challenging world order, weak states that cannot preserve order, and poorly governed spaces that provide sanctuary to extremists who seek to destabilize the globe. The world needs a strong American Joint Force, and since our establishment in 1947, the Air Force remains the world's first and most agile responder in times of crisis, contingency, and conflict. In fact, the Joint Force depends upon Air Force capabilities and requires Airpower at the beginning, the middle, and the end of every Joint operation.

America's Air Force must be able to disrupt, degrade, or destroy any target in the world, quickly and precisely, with conventional or nuclear weapons, to deter and win our Nation's wars. Undoubtedly, decisive air, space, and cyberspace power—and the ability to command and control these forces—have become the oxygen the Joint Force breathes and are fundamental to American security and Joint operations. Whether in support of global counter-terror operations or near-peer deterrence, your Air Force remains constantly committed, as we have without respite for the past 25 years.

However, 25 years of continuous combat operations and reductions to our Total Force coupled with budget instability and lower-than-planned funding levels have resulted in one of the smallest, oldest, and least ready forces across the full-spectrum of operations in our history. The Budget Control Act further degraded our readiness, and there is simply no way to recover without time, money, and people. While the Bipartisan Budget Act of 2015 provides some space to recover readiness

and continue modernization efforts, your Air Force needs permanent relief from BCA, consistent, flexible funding, modestly increased manpower, and time to recover readiness.

IMPACT OF THE BUDGET CONTROL ACT AND SEQUESTRATION

In 2013, sequestration abruptly delayed modernization and reduced both readiness and the size of the Total Force. Specifically, sequestration forced the grounding of one-third of our combat fighter squadrons for three months. It is important to understand the cumulative effect on readiness when the Air Force stops flying. We delay aircrew proficiency and progression, suspend aircraft maintenance, create months of maintenance backlog, and defer major depot inspections and overhauls on our aging fleet. Sequestration also postponed maintenance, repair, and upgrades on our ranges, which degraded high-end training for our combat forces. Furthermore, we canceled partnership-building exercises and could not support multiple Army combat unit certification missions. Half of non-combat joint airlift and air refueling requirements were unsupported. Further, sequestration halted investment in infrastructure repairs cancelling or delaying military construction and facility restoration and modernization projects across the Air Force.

Even worse, we broke faith with our Airmen. We furloughed approximately 180,000 civilian Airmen, froze their pay, and released all temporary and term employees. Professional military education and development of our Airmen stopped, some base facilities closed, and Airmen and family services halted. Our Airmen's trust, loyalty, and confidence eroded during this time. Experienced Airmen accepted Voluntary Early Retirement or Separation Incentive Pay while Air Force recruitment

declined. Bottom line—when an Air Force does not fly, readiness atrophies across the enterprise with impacts that cannot be reversed in the time it took to lose it.

The Air Force entered Fiscal Year 2014 in a government shutdown with fiscal planning focused on a second year of sequestration. We remain grateful for the modest, temporary relief from sequestration in 2014 and 2015. This relief enabled the Air Force to fly to capacity, resume critical aircraft and facility maintenance, invest in our Nuclear Force Improvement Program, fund our training ranges, purchase munitions, and invest in the KC-46, F-35, and LRS-B. Despite this relief, we still made some very tough choices. We attempted to reduce force structure, carried risk in base infrastructure support and military construction, and sacrificed near-term readiness for future modernization.

After submitting our Fiscal Year 2015 budget, our Secretary of Defense outlined five threats that factor into our National security calculus: China, Russia, Iran, North Korea, and the ongoing fight against global terrorism. As a result, the demand for Air Force capability and capacity increased. We made necessary adjustments to balance near-term readiness with future modernization in our Fiscal Year 2016 budget, but our readiness remains at a near all-time low due to continuous combat operations, reduced manpower, an aging fleet, and inconsistent funding. For the last two years, instead of rebuilding readiness for future, high-end conflicts, our Airmen have responded to events across the globe leading and in support of the Joint Force. Although we remain the world's greatest Air Force, a return to sequestration would exacerbate the problem and delay our goal to return to full-spectrum readiness.

STATE OF AIR FORCE

Today, the demand for Air Force capabilities continues to grow as Airmen provide America with Global Vigilance, Global Reach, and Global Power. Airmen are engaged defending U.S. interests around the globe with approximately 200,000 Airmen directly supporting Combatant Commander requirements from home station. Your Air Force has deployed 20,000 Airmen worldwide, and another 80,000 are permanently stationed at overseas bases. In this past year, more than 35,000 Airmen protected our national interests and those of our Allies by ensuring a safe, secure, and reliable nuclear deterrent. We flew nearly 1.7 million flying hours, equal to 194 continuous years of flying. We delivered a staggering 1.2 billion pounds of fuel, 345,000 tons of cargo, and evacuated over 4,000 patients. We also conducted over 8,000 cyber operations and prevented network intrusions. American Airmen performed nearly 10,000 Intelligence, Surveillance and Reconnaissance (ISR) missions around the world and enabled 25 space missions supporting national security objectives while simultaneously tracking over 23,000 objects orbiting the earth. All this was accomplished with a force almost 33 percent smaller than in 1991.

To put our reduced size in perspective, in 1991, during Operation DESERT STORM, we deployed 33 fighter squadrons into our first conflict since Vietnam. At that time, we had 134 combat-coded fighter squadrons, 946,000 active duty, guard, reserve, and civilian Airmen, and 80 percent of the fighter force was ready for full-spectrum operations. Today, we have just 55 combat-coded fighter squadrons, approximately 660,000 Total Force Airmen, and less than 50 percent of our Air Force is ready for full- spectrum operations—a 30 percent reduction since Operation

DESERT STORM. While the extraordinary success of Operation DESERT STORM shaped the world's perceptions of American Airpower, our near-peer adversaries responded by modernizing their forces with systems specifically designed to neutralize our strengths.

As our Secretary of the Air Force and Chief of Staff highlighted, for the first time in a generation, adversaries are challenging America's freedom of maneuver in air, space, and cyberspace in contested regions and near our Allies' borders. The Air Force continues to lead the global response against ISIL in the Middle East while still heavily engaged in Afghanistan. A resurgent Russia now supports Assad in the skies over Syria and has announced their intent to modernize their nuclear forces. In addition, we watched North Korea conduct a space launch and an illegal nuclear test, and we see worrisome military activity in the South China Sea. We also have other growing threats in both space and cyberspace. Our adversaries are closing the capability gap in space and cyber while also fielding advanced air defenses and fifth-generation aircraft. Our strategic capability advantage over competitors is shrinking, and our ability to project strategic deterrence is being challenged.

To meet the full requirements of our Defense Strategic Guidance and current operation plans, we require 80 percent of our combat squadrons to be full-spectrum ready. We define full-spectrum readiness as the right number of Airmen, properly led, trained and equipped, to accomplish our Air Force mission in support of the Joint Force in both contested and uncontested environments.

We measure full-spectrum readiness through our five levers of readiness: critical skills availability, weapons system sustainment, training resource availability,

flying hour program, and operational tempo. If Airmen are not ready for all possible scenarios, especially a high-end fight against a near-peer adversary, it could take longer to get to the fight; it could take longer to win; and it could cost more lives. To maintain the advantage the Air Force provides to the Joint Force, we need sufficient, predictable funding, increased manpower in critical skills areas, and improved deploy-to-dwell time. To achieve balance across our five levers of readiness, the following highlights our state of readiness and where Congressional support for this budget request is needed.

STATE OF AIR FORCE – GLOBAL NUCLEAR POWER

As we emphasized last year, the Air Force represents two-thirds of our Nation's nuclear triad, and the nuclear enterprise remains our number one priority. With both nuclear and conventional forces, the Air Force provides a range of options for America's leaders, but the effects of age are beginning to limit Air Force nuclear capabilities. While our nuclear forces remain safe, secure, and effective, this budget provides significant investment needed to ensure nuclear readiness and unrivaled deterrence for the 21st century. Today's bombers were built in the 1960s and are approximately 55 years old. On average, our facilities were designed for 20 years of service life and are now approximately 40 years old. Currently, all of our weapons storage areas are operating with waivers and deviations from our high standards. Although these storage areas are uncompromised, safe and secure, in order to address the recommendations identified in our Nuclear Enterprise Reviews for facility and weapons sustainment, we require the resource levels requested in this budget.

To ensure a reliable nuclear deterrent for the Joint Force, this budget request

includes modernizing nuclear command and control, replacing some outdated and unsupportable components of Minuteman III ICBM equipment, while also making initial investments in the Ground Based-Strategic Deterrence Program. Our National Airborne Operations Centers provide critical, survivable Nuclear Command, Control, and Communications but they are 35 years old. We must recapitalize this fleet in order to maintain our Command and Control advantage in times of crisis or nuclear conflict. To support the Joint Force, we must ensure our mobile Command and Control systems are able to withstand attacks from space and cyberspace and are sufficiently resilient to function if prevention fails. Additionally, we reorganized our Nuclear Enterprise and established Air Force Global Strike Command as our Air Force lead to ensure continued, sustained, and secure Nuclear Command, Control and Communications. We managed to sustain Air Launched Cruise Missiles and Minuteman III platforms within our resources. We are developing the Long-Range Standoff weapon to provide the Joint Force with a survivable air-launched weapon capable of destroying otherwise inaccessible targets in any conflict zone. This budget request includes the resources to address those critical challenges.

STATE OF AIR FORCE – GLOBAL CONVENTIONAL POWER

Air Superiority is the critical prerequisite for every military operation to ensure freedom of action for the Joint Force and the Nation. Our F-22s are in high demand in the Central, Pacific, and European Commands. Our F-15Cs provide primary support for Homeland Defense and to both the European and Pacific theaters. This capability platforms secure the high ground and have prevented American ground forces from attack by enemy air strike since 1953. Today, our six F-22A squadrons are in high

demand. Therefore, we are continuing last year's investments to modernize advanced air-to-air weaponry, requesting additional funding for sensor and tactical and seeking electronic warfare protection and modern sensor suites for our remaining F-15C fighters. To develop Airmen properly trained to meet the Combatant Commanders' demand signals, we funded flying hours to their maximum executable level and are continuing to invest in full-spectrum combat exercises like Red Flag and Green Flag. We have properly resourced these readiness components in this year's budget and request Congressional support for these critical requirements.

We also testified last year that weapons system sustainment is a key component of readiness. Weapons system sustainment costs continue to increase due to the complexity of new systems, the challenges of maintaining old systems, operations tempo, and increasing demand for maintenance personnel. The longer we extend the service life of our legacy aircraft, the more investment, preventive, maintenance and manpower they require. We fly all of our aircraft to their full service life and beyond.

This year's budget continues investment in modernizing and sustaining the three combat-coded B-1 squadrons with additional precision weapons, digital data links, and other improvements aimed to negate diminished manufacturing resources. Similar to last year, we will also invest in extending the B-1 service life to maintain this strategic capability against evolving threats. We are approaching our second service life extension on F-16s. Our F-15Cs and F-15Es, which are in high demand, are experiencing structural fatigue and require the sustained, consistent funding requested in this budget for repairs to remain effective.

Since Operation INHERENT RESOLVE in 2014, we have expended over \$1.2 billion in munitions and continue to deplete our inventories in Iraq and Syria. We dropped over 28,000 munitions in support of operations in Syria and Iraq. Our Hellfire expenditures in Operations INHERENT RESOLVE, ENDURING FREEDOM, and FREEDOM'S SENTINEL increased nearly 500 percent since 2012, but procurement did not keep pace. Therefore, in this budget we will fund munitions to capacity to support current operations and start the process to replenish current inventories.

Similar to last year, we're seeking support in this budget submission to increase our capacity to provide Airmen with increased high-end training against realistic scenarios and threats. Regrettably, investments in aging critical infrastructure such as ranges, airfields, facilities, and even basic infrastructure like power and drainage systems, have been repeatedly delayed, and the problem was significantly exacerbated by sequestration. Every year that we delay these repairs affects operations and substantially increases improvement costs. Even with the world's most advanced technology, our Airmen are at a disadvantage without conducting realistic combat training exercises involving the Joint Force, our Allies, and our partners. Red Flags, and other similar training exercises, built the foundation for our success in air campaigns during the past 25 years. We need your support for this budget request to continue investment in computer-aided live, virtual, and constructive training to provide opportunities to train against the world's most capable threats, provide routine training at lower costs, and achieve the full-spectrum readiness that is vital for our national defense and to safeguard U.S. interests abroad.

STATE OF AIR FORCE – GLOBAL VIGILANCE

Our global security environment drives an insatiable demand for integrated ISR. Today, the Air Force continues to sustain 60 Combat Air Patrols through cross-domain synchronization. With 74 percent of our ISR forces operating in direct support of combat operations, limited time remains for training and recuperation. The high demand impacts our ability to train and retain this critical skill set. Currently less than one third of our Rivet Joint linguists re-enlist, and our Intelligence career fields are critically manned.

This critical reduction of experience, coupled with the insatiable demand for Collection Management, Expeditionary Targeting, Expeditionary Signals Intelligence, and Airborne ISR Operators drove heavy reliance on contract personnel. While contract personnel fill a just-in-time requirement—and perform admirably—this solution does little for the long-term health of the ISR Enterprise.

To improve the quality of mission for our ISR community, the budget includes funds to create a dedicated launch and recovery MQ-1/9 squadron, increase training, and restore two MQ-9 operations squadrons. Additionally, the budget funds training for enlisted operators to fly the RQ-4 Global Hawk and to conduct a basing study to provide options to eventually fly RPAs on a schedule more conducive to steady-state operations.

Equally strained are the more than 7,000 Airmen working in our Distributed Common Ground System. These Airmen supported over 29,000 ISR missions and analyzed more than 380,000 hours of full motion video in the last year; they have operated at these surge levels for a decade. Therefore, this budget funds continued investment in our ISR Enterprise to provide globally integrated ISR that supports multi-

domain, actionable intelligence for the Joint Force.

As we testified last year, space and cyberspace are no longer sanctuaries. In space, our Global Positioning System provides the world's gold standard, supporting citizens across the globe every day. Fortunately, our 40 existing Global Positioning System satellites remain healthy, but they are exceeding projected service life. To maintain this capability and to build readiness for any potential conflict, we are requesting support to improve anti-jamming and secure access of military Global Positioning Systems. We also continue to partner with the Joint Force on the Space Security and Defense Program and the Joint Interagency Combined Space Operations Center to develop options for a more resilient National Security Space Enterprise.

Our cyberspace capabilities are essential to every Airman, platform, and mission in our portfolio. Therefore this budget request makes strategic investments in our cyber capabilities. For instance many of our weapons systems were developed prior to the emergence of the rapidly evolving cyber threats existing today. A cyber intrusion could significantly impact our ability to project vigilance, reach, and power anytime, anywhere. To improve offensive and defensive cyber readiness, we plan to grow our 26 Cyber Force Mission Teams to 39 fully operational teams by Fiscal Year 2019 and continue our investments in the Joint Information Environment.

Turning to command and control, this is the glue that enables Joint Force operations and provides the essential link between our Joint Force Air Component Commander and all Joint Forces working for Combatant Commanders. The ability to understand changing battlefield conditions and command friendly forces is central to

an effective, agile combat force especially as we face more threats that are trans-regional and span from traditional state adversaries to non-state unconventional forces. At any of our Air Operations Centers, located in every Combatant Commander's area of responsibility, you will find Airmen providing the backbone and expertise to integrate effects from every warfighting domain. The budget also includes funds to upgrade legacy equipment to open architectures to ensure critical security improvements. Our E-8 Joint Surveillance Target Attack Radar System (JSTARS) is 47 years old and will begin to reach the end of its service life next year. The E-3 Airborne Warning and Control System (AWACS) is 35 years old and requires multiple upgrades to keep this capability ahead of emerging threats. We need your support for this budget to fund mature communications, sensors, and Battle Management Command and Control system technologies to recapitalize our JSTARS and AWACS.

STATE OF AIR FORCE – GLOBAL REACH

Airmen perform the Rapid Global Mobility mission every day in areas of peace and conflict, and provide our Nation the ability to move the Joint Force rapidly to any point on the globe. Flexibility allows Airmen to deliver bombs and bullets to the Joint Force in Iraq and Afghanistan, as well as blankets and bundles of life-saving relief supplies. Following last year's devastating earthquake in Nepal, C-130s and C-17s, refueled by KC-135s, accomplished over 150 missions delivering more than 800 tons of cargo. This core mission was also exemplified in March 2011 when we executed more than 300 airlift and combat sorties in a single day. During that time, every

Combatant Commander had a Priority 1 mission, and the Air Force accomplished each one without fail. We simultaneously delivered humanitarian relief to tsunami-ravaged Japanese cities, established and enforced a no-fly zone over Libya with Operations ODYSSEY DAWN and UNIFIED PROTECTOR, surged forces in Afghanistan for Operation ENDURING FREEDOM, and supported Presidential airlift.

Today, airframes have aged significantly and some of the same tankers refueling aircraft over Iraq and Syria were present over Vietnam. In fact, the Air Force's oldest flying KC-135, assigned to the 190th Air Refueling Wing at Forbes Field, Kansas, was refueling aircraft when some Vietnam-era pilots were still in elementary school. This year's investments begin to recapitalize refueling capabilities with the KC-46A and are essential to combat operations in anti-access/area denial environments. It also accelerates the C-130 Avionics Modernization Program and funds modernization to sustain our approximately 40-year-old MC-130 and AC-130 fleet, which support our Special Operations Command.

STATE OF AIR FORCE – PEOPLE AND INFRASTRUCTURE

Full-spectrum readiness cannot be achieved without investing in our Total Force Airmen. Maintaining our strategic advantage necessitates reaching, recruiting, retaining, and developing the broadest and most talented All Volunteer Force our Nation has to offer. To improve mission quality, the budget includes a modest upsizing of our Total Force to address a number of key areas, including critical career fields such as intelligence, cyber, maintenance and battlefield Airmen. A prime example of a critical career field is aircraft maintenance. Today, we are short approximately 4,000 aircraft maintainers. We require support to employ the

manpower to keep our existing aircraft flying at home and in combat, while simultaneously growing and training our new F-35 workforce. Due to an ongoing shortage of active duty aircraft maintainers, this budget request will fund contract maintenance personnel to fill the gap at select non-combat A-10, F-16, and C-130 units allowing our active duty maintainers to transition to the F-35. This allows us to strike the best balance between meeting today's demand while modernizing for the future.

As stated previously, we project airpower from our bases, and our infrastructure must keep up with modernization and recapitalization to sustain a ready force. To consolidate management, reduce overhead costs, and increase efficiencies, we centralized installation management under the Air Force Installation and Mission Support Center. This new command structure consolidates installation support requirements from the headquarters, major commands, and multiple field operating agencies. This budget request prioritizes readiness and modernization over installation support. With this decision we focused investments on a "mission critical, worst first" philosophy, funding projects with the most mission impact. Today the Air Force maintains infrastructure that is in excess of our operational needs. We have 500 fewer aircraft today than we had 10 years ago, yet they are spread across the same number of bases. This arrangement is inefficient with aging, unused facilities consuming funding that should be used for readiness and modernization. A reduction and realignment of Air Force infrastructure would best support Air Force operational needs, therefore we support another round of base realignment and closure.

FUTURE STATE OF THE AIR FORCE

The Air Force, in consultation with Combatant Commanders, academia, and think tanks developed a 30 Year Strategic Plan to make our forces more agile to effectively respond to future global conflicts. The plan provides for increased capability across all mission areas, specifically Adaptive Domain Control, Globally integrated ISR, Rapid Global Mobility, Global Precision Strike, and Multi-domain Command and Control. Yet, budget uncertainty has complicated our ability to execute this plan. Furthermore, the Air Force faces a modernization bow wave over the next 10 years that requires funding well beyond the BCA caps—this includes critical programs necessary to meet our capacity and capability requirements across all mission areas. Although we are grateful for the Bipartisan Budget Act relief, we still face great uncertainty for Fiscal Year 2018 and beyond. Without the funding requested in this budget, we cannot meet current demand for Air Force capability and capacity without sacrificing modernization.

As our potential adversaries employ increasingly sophisticated, capable, and lethal systems, your Air Force must modernize to deter, deny, and decisively defeat any actor that threatens the homeland and our national interests. Without the resources requested in our Fiscal Year 2017 budget, we will delay F-35 and C-130H recapitalization, defer some fourth-generation aircraft modifications, slow our planned end strength growth to 317,0000 and take even more risk in Air Force infrastructure. A return to Budget Control Act funding levels would necessitate delays to modernization efforts. It would also further erode the already shrinking capability gap between America and our adversaries, and it would defer critical investments in space and cyber.

A return to Budget Control Act funding in Fiscal Year 2018 would force us to revisit actions taken during Fiscal Year 2013's sequestration—actions that devastated readiness and broke faith with our Airmen. We would be forced to divest force structure, disrupt readiness recovery, delay modernization efforts, defer investments in space and cyber, and triage maintenance on infrastructure and aircraft. It would continue to degrade base infrastructure, delay Airmen growth, and limit critical skill set recruitment and retention resulting in a less ready, less capable force. Air Force readiness depends on your support of this this budget and your support for repeal of the Budget Control Act to remove the threat of sequestration—permanently.

CONCLUSION

In the face of a dynamic, complex, and unpredictable future, your Airmen provide a strategic advantage over America's rivals. They are educated, innovative, and motivated. Our Airmen's ability to see threats, reach threats, and strike threats is a powerful deterrent against America's enemies. These courageous Airmen, when properly trained, effectively equipped, and emboldened by the trust of their leadership, will ensure the Air Force continues to outwit and outlast opponents in Joint and Coalition operations and defend the United States from any who would do us harm.

As our Army and Marine Corps get smaller, they do not want less airlift; they want it to be more responsive. As Combatant Commanders look toward battlefields of the future, they do not want less ISR; they need more persistent, capable, and agile ISR. We have the responsibility to assure air superiority so American Soldiers and Marines keep their eyes on their enemies on the ground rather than concern

themselves with enemy Airpower overhead.

The Fiscal Year 2017 budget request—and the flexibility to execute it as we recommended—is an investment in the Air Force our Nation needs. The global developments remind us that America's Air Force must have the capability to engage anytime, anywhere, and across the full spectrum of conflict, all while providing a reliable strategic nuclear deterrent. America expects it; Combatant Commanders require it; and with your support for this budget request, our Airmen will deliver it.

GENERAL DAVID L. GOLDFEIN

Gen. David L. Goldfein is Vice Chief of Staff of the U.S. Air Force, Washington, D.C. As Vice Chief, he presides over the Air Staff and serves as a member of the Joint Chiefs of Staff Requirements Oversight Council and Deputy Advisory Working Group. He assists the Chief of Staff with organizing, training, and equipping of 664,000 active-duty, Guard, Reserve and civilian forces serving in the United States and overseas.

Prior to assuming his current position, General Goldfein was the Director, Joint Staff, the Pentagon, Washington, D.C. He assisted the Chairman of the Joint Chiefs of Staff in fulfilling his responsibilities as the principal military adviser to the President and Secretary of Defense by developing and providing strategic direction, policy guidance and planning focus to the Joint Staff and by fostering clear communication among the President, Secretary of Defense, unified commands, and services.

General Goldfein received his commission from the U.S. Air Force Academy in 1983. He is a graduate of the U.S. Air Force Weapons School and is a command pilot with more than 4,200 flying hours in the T-37, T-38, F-16C/D, F-117A, MQ-9 and MC-12W. He has flown combat missions in operations Desert Shield, Desert Storm, Northern Watch, Allied Force and Enduring Freedom.

EDUCATION

1983 Bachelor of Science degree in philosophy, U.S. Air Force Academy, Colorado Springs, Colo.
 1986 Squadron Officer School, by correspondence
 1987 Master's degree in business administration, Oklahoma City University, Okla.
 1992 Fighter Weapons Instructor Course, Nellis AFB, Nev.
 1995 Air Command and Staff College, Maxwell AFB, Ala.
 1998 Air War College, by correspondence
 2001 National Defense Fellowship, State Department Senior Seminar, Arlington, Va.

ASSIGNMENTS

1. October 1983 - October 1984, student, undergraduate pilot training, Sheppard AFB, Texas
2. October 1984 - February 1988, T-38 instructor pilot, 90th Flying Training Squadron, Sheppard AFB, Texas
3. February 1988 - January 1992, F-16 instructor pilot and flight commander, 17th Tactical Fighter Squadron, Shaw AFB, S.C.
4. January 1992 - June 1992, student, USAF Fighter Weapons Instructor Course, Nellis AFB, Nev.
5. June 1992 - July 1994, squadron weapons officer and Chief, Wing Weapons and Tactics, 366th Composite Wing, Mountain Home AFB, Idaho
6. July 1994 - June 1995, student, Air Command and Staff College, Maxwell AFB, Ala.
7. June 1995 - May 1996, special assistant to the Commander, Allied Air Forces Southern Europe and 16th Air Force, Naples, Italy
8. May 1996 - August 1997, executive officer to the Commander, U.S. Air Forces in Europe, Ramstein Air Base, Germany
9. August 1997 - June 1998, operations officer, 555th Fighter Squadron, Aviano AB, Italy
10. June 1998 - July 2000, Commander, 555th Fighter Squadron, Aviano AB, Italy
11. July 2000 - June 2001, student, National Defense Fellow, State Department Senior Seminar, Arlington, Va.
12. July 2001 - July 2002, Deputy Division Chief, Combat Forces, Headquarters U.S. Air Force, Washington, D.C.
13. August 2002 - July 2004, Commander, 366th Operations Group, Mountain Home AFB, Idaho
14. July 2004 - June 2006, Commander, 52nd Fighter Wing, Spangdahlem AB, Germany
15. June 2006 - January 2008, Commander, 49th Fighter Wing, Holloman AFB, N.M.
16. January 2008 - August 2009, Deputy Director of Programs, Office of the Deputy Chief of Staff for Strategic Plans and Programs, Headquarters U.S. Air Force, Washington D.C.
17. August 2009 - August 2011, Director of Operations, Air Combat Command, Joint Base Langley-Eustis, Va.
18. August 2011 - July 2013, Commander, U.S. Air Forces Central Command, Southwest Asia
19. August 2013 - August 2015, Director, Joint Staff, the Pentagon, Washington, D.C.
20. August 2015 - present, Vice Chief of Staff of the U.S. Air Force, Washington, D.C.

SUMMARY OF JOINT ASSIGNMENTS

1. June 1995 - May 1996, special assistant to the Commander, Allied Air Forces Southern Europe and 16th Air Force, Naples, Italy, as a major
2. May 1996 - August 1997, executive officer to the Commander, Allied Air Forces Europe, Ramstein Air Base, Germany, as a major
3. August 2013 - August 2015, Director, Joint Staff, the Pentagon, Washington, D.C., as a lieutenant general

FLIGHT INFORMATION

Rating: command pilot
Flight hours: more than 4,200
Aircraft flown: T-37, T-38, F-16C/D, F-117A, MQ-9, and MC-12W

MAJOR AWARDS AND DECORATIONS

Distinguished Service Medal
Legion of Merit with oak leaf cluster
Distinguished Flying Cross with oak leaf cluster
Meritorious Service Medal with two oak leaf clusters
Air Medal with silver and bronze oak leaf clusters
Aerial Achievement Medal with oak leaf cluster
Joint Service Commendation Medal
Air Force Commendation Medal with oak leaf cluster
Air Force Achievement Medal

PUBLICATIONS

"Sharing Success, Owning Failure: Preparing to Command in the Twenty-First Century Air Force," Air University Press, October 2001

EFFECTIVE DATES OF PROMOTION

Second Lieutenant June 1, 1983
First Lieutenant June 1, 1985
Captain June 1, 1987
Major Nov. 1, 1994
Lieutenant Colonel Jan. 1, 1998
Colonel April 1, 2001
Brigadier General Oct. 1, 2007
Major General July 3, 2010
Lieutenant General Aug. 3, 2011
General Aug. 17, 2015

(Current as of October 2015)

LIEUTENANT GENERAL JOHN W. "JAY" RAYMOND

Lt. Gen. John W. "Jay" Raymond is the Deputy Chief of Staff for Operations, Headquarters U.S. Air Force, Washington, D.C. He is responsible to the Secretary of the Air Force and the Chief of Staff for formulating policy supporting air, space, cyber, irregular warfare, counter-proliferation, homeland security, and weather operations. As the Air Force operations deputy to the Joint Chiefs of Staff, the general determines operational requirements, capabilities and training necessary to support national security objectives and military strategy.

General Raymond was commissioned through the ROTC program at Clemson University in 1984. He has commanded the 5th Space Surveillance Squadron at Royal Air Force Feltwell, England; the 30th Operations Group at Vandenberg Air Force Base, Calif.; and the 21st Space Wing at Peterson AFB, Colo. He deployed to Southwest Asia as Director of Space Forces in support of operations Enduring Freedom and Iraqi Freedom. The general's staff assignments include Headquarters Air Force Space Command, U.S. Strategic Command, the Air Staff and the Office of Secretary of Defense, and the Director of Plans and Policy, Headquarters U.S. Strategic Command, Offutt AFB, Neb. Prior to his current assignment, General Raymond was the Commander, 14th Air Force (Air Forces Strategic), Air Force Space Command, and Commander, Joint Functional Component Command for Space, U.S. Strategic Command, Vandenberg AFB, Calif.

EDUCATION

- 1984 Bachelor of Science degree in Administrative Management, Clemson University, S.C.
- 1990 Squadron Officer School, Maxwell AFB, Ala.
- 1990 Master of Science degree in Administrative Management, Central Michigan University
- 1997 Air Command and Staff College, Maxwell AFB, Ala.
- 2003 Master of Arts degree in National Security and Strategic Studies, Naval War College, Newport, R.I.
- 2007 Joint Forces Staff College, Norfolk, Va.
- 2011 Combined Force Air Component Commander Course, Maxwell AFB, Ala.
- 2012 Joint Flag Officer Warfighting Course, Maxwell AFB, Ala.

ASSIGNMENTS

1. August 1985 - October 1989, Minuteman intercontinental ballistic missile crew commander; alternate command post; flight commander and instructor crew commander; and missile procedures trainer operator, 321st Strategic Missile Wing, Grand Forks AFB, N.D.
2. October 1989 - August 1993, operations center officer controller, 1st Strategic Aerospace Division, and executive officer, 30th Space Wing, Vandenberg AFB, Calif.
3. August 1993 - February 1996, Chief, Commercial Space Lift Operations, assistant Chief, Current Operations Branch, Headquarters Air Force Space Command, Peterson AFB, Colo.
4. February 1996 - August 1996, Deputy Director, Commander in Chief's Action Group, Headquarters Air Force Space Command, Peterson AFB, Colo.
5. August 1996 - June 1997, student, Air Command and Staff College, Air University, Maxwell AFB, Ala.
6. June 1997 - August 1998, space and missile force programmer, Headquarters U.S. Air Force, Washington, D.C.
7. September 1998 - April 2000, Chief, Expeditionary Aerospace Force Space and Program Integration, Expeditionary Aerospace Force Implementation Division, Headquarters U.S. Air Force, Washington, D.C.
8. April 2000 - June 2001, Commander, 5th Space Surveillance Squadron, Royal Air Force Feltwell, England
9. June 2001 - July 2002, Deputy Commander, 21st Operations Group, Peterson AFB, Colo.
10. July 2002 - June 2003, student, Naval War College, Newport, R.I.
11. June 2003 - June 2005, transformation strategist, Office of Force Transformation, Office of the Secretary of Defense, Washington, D.C.
12. June 2005 - June 2007, Commander, 30th Operations Group, Vandenberg AFB, Calif. (September 2006 - January 2007, Director of Space Forces, Combined Air Operations Center, Southwest Asia)
13. June 2007 - August 2009, Commander, 21st Space Wing, Peterson AFB, Colo.
14. August 2009 - December 2010, Director of Plans, Programs and Analyses, Headquarters Air Force Space Command, Peterson AFB, Colo.

15. December 2010 - July 2012, Vice Commander, 5th Air Force, and Deputy Commander, 13th Air Force, Yokota Air Base, Japan
16. July 2012 - January 2014, Director of Plans and Policy (J5), U.S. Strategic Command, Offutt AFB, Neb.
17. January 2014 - August 2015, Commander, 14th Air Force (Air Forces Strategic), Air Force Space Command, and Commander, Joint Functional Component Command for Space, U.S. Strategic Command, Vandenberg AFB, Calif.
18. August 2015 - present, Deputy Chief of Staff, Operations, Headquarters, U.S. Air Force, Washington, D.C.

SUMMARY OF JOINT ASSIGNMENTS

1. June 2003 - June 2005, transformation strategist, Office of Force Transformation, Office of Secretary of Defense, Washington, D.C., as a colonel
2. July 2012 - January 2014, Director of Plans and Policy (J5), U.S. Strategic Command, Offutt AFB, Neb., as a major general
3. January 2014 - August 2015, Commander, Joint Functional Component Command for Space, USSTRATCOM, Vandenberg AFB, Calif., as a lieutenant general

OPERATIONAL INFORMATION

Badges: Master Space Operations Badge, Master Missile Operations Badge
Systems: Counter Communications System, Deep Space Tracking System, Minuteman III

MAJOR AWARDS AND DECORATIONS

Distinguished Service Medal with oak leaf cluster
Defense Superior Service Medal
Legion of Merit with oak leaf cluster
Meritorious Service Medal with four oak leaf clusters
Air Force Commendation Medal
Combat Readiness Medal
Global War on Terror Expeditionary Medal
Global War on Terrorism Service Medal

OTHER ACHIEVEMENTS

2007 General Jerome F. O'Malley Distinguished Space Leadership Award, Air Force Association
2015 Thomas D. White Space Award, Air Force Association

EFFECTIVE DATES OF PROMOTION

Second Lieutenant July 20, 1984
First Lieutenant July 20, 1986
Captain July 20, 1988
Major July 1, 1996
Lieutenant Colonel July 1, 1999
Colonel July 1, 2004
Brigadier General Aug. 19, 2009
Major General May 4, 2012
Lieutenant General Jan. 31, 2014

(Current as of September 2015)

LIEUTENANT GENERAL JOHN B. COOPER

Lt. Gen. John B. Cooper is Deputy Chief of Staff for Logistics, Engineering and Force Protection, Headquarters U.S. Air Force, Washington, D.C. General Cooper is responsible to the Chief of Staff for leadership, management and integration of Air Force logistics readiness; aircraft, munitions, and missile maintenance; civil engineering; and security forces, as well as setting policy and preparing budget estimates that reflect enhancements to productivity, combat readiness and quality of life for Air Force people.

General Cooper entered the Air Force in 1983 and received his commission through the ROTC program at The Citadel in Charleston, South Carolina. He is a career logistician who has commanded two maintenance squadrons, one maintenance group and one maintenance wing. General Cooper has also held a variety of staff leadership positions, and has been the Director of Logistics for three separate major commands and for Headquarters U.S. Air Force. Prior to this assignment, the general was the Director of Logistics, Headquarters Air Combat Command.

EDUCATION

1983 Bachelor of Science degree in business administration, The Citadel, Charleston, S.C.
 1990 Squadron Officer School, Maxwell AFB, Ala.
 1992 Master of Arts degree in business management, Webster University, Webster Groves, Mo.
 1995 Air Command and Staff College, Maxwell AFB, Ala.
 1999 Master of Science degree in strategic studies, Air War College, Maxwell AFB, Ala.
 2007 U.S. Air Force Senior Leadership Course, Center for Creative Leadership, Greensboro, S.C.
 2010 Enterprise Leadership Seminar, Darden School of Business, University of Virginia, Charlottesville
 2012 Senior Managers in Government, John F. Kennedy School of Government, Harvard University, Cambridge, Mass.
 2012, Executives in Logistics and Technology, Kenan-Flagler Business School, University of North Carolina, Chapel Hill

CAREER CHRONOLOGY

1. November 1983 - November 1986, Munitions Maintenance Officer, Hurlburt Field, Fla.
2. December 1986 - October 1988, Officer in Charge, Integrated Munitions Maintenance Branch; officer in charge, Armament Systems Branch; Maintenance Supervisor, 380th Munitions Maintenance Squadron, Plattsburgh AFB, N.Y.
3. October 1988 - October 1990, officer in charge, Aircraft Generation Branch; officer in charge, Equipment Maintenance Branch, 39th Consolidated Aircraft Maintenance Squadron, Incirlik Air Base, Turkey
4. November 1990 - June 1994, Assignments Action Officer, then Executive Officer for the Chief, Mission Support Officer Assignments, Air Force Military Personnel Center, San Antonio, Texas
5. July 1994 - June 1995, Student, Air Command and Staff College, Maxwell AFB, Ala.
6. July 1995 - July 1997, Commander, 4th Logistics Support Squadron, Seymour Johnson AFB, N.C.
7. July 1997- June 1998, Commander, 4th Equipment Maintenance Squadron, Seymour Johnson AFB, N.C.
8. July 1998 - July 1999, Student, Air War College, Maxwell AFB, Ala.
9. August 1999 - July 2002, Chief, Propulsion Branch, Headquarters Air Combat Command, Langley AFB, Va.
10. August 2002 - July 2004, Deputy Commander, 3rd Maintenance Group, Elmendorf AFB, Alaska
11. July 2004 - July 2006, Commander, 16th Maintenance Group, Hurlburt Field, Fla.
12. July 2006 - June 2008, Director of Logistics, Headquarters Air Force Special Operations Command, Hurlburt Field, Fla.
13. July 2008 - September 2010, Commander, 309th Maintenance Wing, Ogden Air Logistics Center, Hill AFB, Utah
14. October 2010 - November 2011, Director of Logistics, Installations and Mission Support, Headquarters U.S. Air Forces in Europe, Ramstein AB, Germany

- 15. November 2011 - May 2014, Director of Logistics, Deputy Chief of Staff for Logistics, Installations and Mission Support, Headquarters U.S. Air Force, Washington, D.C.
- 16. May 2014 - May 2015, Director of Logistics, Headquarters Air Combat Command, Joint Base Langley-Eustis, Va.
- 17. May 2015 - present, Deputy Chief of Staff for Logistics, Engineering and Force Protection, Headquarters U.S. Air Force, Washington, D.C.

MAJOR AWARDS AND DECORATIONS

Distinguished Service Medal with oak leaf cluster
Legion of Merit with oak leaf cluster
Meritorious Service Medal with four oak leaf clusters
Air Force Commendation Medal with three oak clusters
Air Force Achievement Medal with oak leaf cluster
Global War on Terrorism Expeditionary Medal
Global War on Terrorism Service Medal

EFFECTIVE DATES OF PROMOTION

Second Lieutenant May 14, 1983
First Lieutenant June 17, 1985
Captain June 17, 1987
Major Nov. 1, 1994
Lieutenant Colonel Jan. 1, 1998
Colonel June 1, 2003
Brigadier General Dec. 9, 2008
Major General Dec. 5, 2011
Lieutenant General May 22, 2015

(Current as of May 2015)

**WITNESS RESPONSES TO QUESTIONS ASKED DURING
THE HEARING**

FEBRUARY 12, 2016

RESPONSE TO QUESTION SUBMITTED BY MR. COURTNEY

General GOLDFEIN. C-130H AMP Increments 1 and 2 are both fully funded in the FY17 PB. In accordance with Congressional guidance, AMP Increment 1 has been accelerated to complete in December 2019, prior to the January 2020 FAA mandate. AMP Increment 2 is accelerated by 14 years to modernize the fleet by 2028. C-130H AMP Increment 2 now modifies at a rate of 22 aircraft per year; this rate was determined by considering expected aircraft downtime during modification and impact on current operations. No further assistance is requested at this time. [See page 10.]

RESPONSE TO QUESTION SUBMITTED BY MR. LOBIONDO

General GOLDFEIN. We expect the SecAF will approve the enterprise and criteria for the F-35A OPS 5, 6, and 7 early this spring. [See page 12.]

QUESTIONS SUBMITTED BY MEMBERS POST HEARING

FEBRUARY 12, 2016

QUESTIONS SUBMITTED BY MR. WITTMAN

Mr. WITTMAN. In July 2015, the Marine Corps declared that the F-35 had achieved initial operational capability (IOC) even though it had not met all of the requirements outlined in the Marine Corps IOC requirements letter. As the Air Force prepares to declare initial operational capability for the F-35A in August 2016, what steps are being taken to ensure that the Air Force meets all of the IOC requirements outlined in its IOC requirements letter?

General GOLDFEIN. In his January 30, 2015 IOC requirements letter, the Commander of Air Combat Command (COMACC), Gen Carlisle, stated, "USAF F-35A IOC shall be declared when USAF Airmen are trained, manned and equipped to conduct basic Close Air Support (CAS), interdiction, and limited Suppression/Destruction of Enemy Air Defense (SEAD/DEAD) operations in a contested environment. The F-35A shall have the ability to conduct operational missions utilizing System Development and Demonstration (SDD) program of record weapons and mission systems. The war fighter shall be supported with verified tactics detailing core mission fundamentals. The first USAF F-35A operational squadron shall have 12-24 primary aircraft and shall be capable of deploying and performing its assigned mission(s). In-place logistics elements shall include personnel, support equipment, spares, munitions, verified technical manuals, and training programs. In-place operational elements shall include pilots, maintenance personnel, operations support personnel, verified technical manuals, mission qualification training programs, and training devices. USAF IOC is capability-based and will be declared when the above requirements are met." Consistent with the Integrated Master Schedule, the program is on track for IOC within the window of August 1, 2016 (objective) and December 31, 2016 (threshold).

COMACC reviews program schedule and performance monthly to consider status and progress toward IOC. He is closely monitoring three areas: software/radar stability, Autonomic Logistics Information System software delivery, and Mission Data File delivery. With this increased attention we are confident we will achieve IOC requirements within the August to December 2016 window.

Mr. WITTMAN. Live-fly training, particularly for 5th generation aircraft, can be limited due to range restrictions, airspace and threat replicator limitations, environmental factors, and other issues. The Air Force has identified the integration of live, virtual, and constructive (LVC) training as critical to its vision of how best to train aircrews in complex environments.

Is the current range and air space infrastructure sufficient to meet the training needs of the Air Force? If not, what aircraft are most affected by range and air space limitations?

General GOLDFEIN. No. We are currently limited in our ability to provide relevant and realistic training to 4th Generation and 5th Generation aircrews; because our live environment cannot fully replicate the conditions they may encounter in future conflicts. Our limiting factors include a lack of realistic threat density, limitations on spectrum use, and the increasing footprints required for new weapons and weapon systems. We are investing across the FYDP to upgrade our threat replication capability and develop better synthetic training capabilities.

Mr. WITTMAN. Are any additional training resources, such as adversary air for training purposes, required to support 5th generation or legacy aircraft?

General GOLDFEIN. Yes. Live adversaries using realistic threat tactics with appropriately sized threat presentations and realistic ground-based threats, range infrastructure, and target sets capable of emulating potential adversary defenses are required to provide relevant and realistic high end training for 4th Generation and 5th Generation aircrews. Additionally, systems capable of emulating adversary jammers would further enhance live training.

Mr. WITTMAN. What plans, if any, does the Air Force have to make investments in training resources before additional 5th generation squadrons reach initial operational capability status?

General GOLDFEIN. The Air Force has significant plans to invest in live, virtual, and constructive training environments; live capabilities such as ranges, threats, adversary air, and electronic attack; simulation capabilities to include a timely fielding

of F-35 Full Mission Simulators; and a robust investment in Distributed Mission Training capability. Our plans for constructive capabilities include technology demonstrators such as the Joint Synthetic Environment (JSE); a synthetic training environment that will enhance future 5th generation training, and Secure Live Virtual Constructive Advanced Training Environment (SLATE); which is a live training environment with synthetic input that will integrate LVC training environments.

Mr. WITTMAN. To what extent has the Air Force identified specific live-fly training challenges that will be overcome by training in a simulated environment?

General GOLDFEIN. The AF has carefully identified, assessed, and understands the growing challenges to live-fly training. In response to these challenges, the Air Force will increasingly leverage virtual simulators to raise the level of overall training effectiveness, especially in the highly contested environment. Fifth (5th) generation weapon systems offer a unique challenge in that their capabilities cannot be fully exercised in the live environment, and will benefit greatly using high fidelity synthetic training.

Mr. WITTMAN. To what extent has the Air Force developed an investment strategy to ensure it will have the resources needed to carry out its LVC vision?

General GOLDFEIN. Currently, the AF is developing an over-arching investment strategy at the enterprise level. Air Force Major Commands (MAJCOMs) have developed Core Function Master Plans/LVC investment strategies leading to the President's Budget input.

Mr. WITTMAN. Discuss the linkage between decreased aircraft inventory, airframe age and flight hours, manpower and readiness.

General GOLDFEIN. Twenty-five years of continuous combat operations, coupled with budget instability and lower than planned top lines, have made the Air Force one of the smallest, oldest and least ready forces in its history.

To put our relative size, age, and readiness in perspective, in 1991 we deployed 33 of our 134 combat-coded Active, Guard, and Reserve fighter squadrons in support of Operation Desert Storm. We were 946,000 airmen strong. The average age of our aircraft was 17 years, and 80 percent of the fighter force was ready for full-spectrum conflict. In contrast, today we have just 55 total force fighter squadrons, and approximately 660,000 total force airmen. The average age of our aircraft is 27 years, and less than 50 percent of our combat Air Force is ready for full-spectrum conflict.

If we are to remain the most lethal and effective air, space, and cyberspace force on the planet, we must take steps to rebuild our readiness now. In order to accomplish this goal, the fiscal year 2017 budget aims to build, train and equip an Air Force capable of responding to today's and tomorrow's threats.

The F-35, KC-46 and LRSB will change the calculus of any potential adversary and will be critical to success in any future high-end fight. For an Air Force, failing to push the technological edge equals failure, and when the Air Force fails, the joint team fails. Our Fiscal Year 2017 budget request includes the funding required to recover the manpower needed to ensure the health of our nuclear forces, aircraft maintenance teams, battlefield airmen, and other critically under-manned and over-tasked capabilities. A return to BCA-level funding in Fiscal Year 2018 will further decimate our readiness and modernization, and will place the nation at an unacceptable risk.

QUESTIONS SUBMITTED BY MS. BORDALLO

Ms. BORDALLO. What percentage of readiness could the Air Force reasonably attain and by what time frame? How much of the Air Force's capacity is consumed by day-to-day, steady-state operations? What is the Air Force's capacity to provide additional "surge" forces to respond to a major contingency? How would you characterize the Air Force's readiness for full-spectrum combat operations?

General GOLDFEIN. a. Our Nation needs its Air Force to be at least 80% full spectrum ready. It will take eight to ten years to achieve that level of readiness if we actually get the conditions set to be able to rebuild readiness. The one variable we don't control is the operations tempo, and at current capacity, the current tempo creates a rolling timeframe for readiness recovery.

b. Current readiness capacity is being consumed faster than we can rebuild it. The Air Force has approximately 20,000 Airmen deployed worldwide and another 71,000 permanently stationed at overseas bases. In particular, 2/3 of our fighter squadrons are engaged on a day-to-day basis. That's why in this year's budget we valued capacity and readiness over modernization.

c. If required, the AF is postured to provide nearly 100% of its combat force in response to a major contingency, however surging to that contingency may involve

disengaging from existing steady-state operations. Because over 50% of our forces are not sufficiently ready for a high-end, full spectrum fight, it could take longer to get to the fight, it could take longer to win, and potentially cost more lives.

d. Twenty-five years of continuous combat operations and difficult decisions in the face of austere budgets has shaved our capacity to the point where our strategic reserve is now operationalized to support rotational demand, and the Total Force is required to surge in response to a major contingency. As of now, less than 50% of Air Force units are full spectrum ready.

Ms. BORDALLO. How would you assess “high-end” combat skills, such as those that would be employed against a near-peer competitor? What do you believe are the biggest obstacles in the Air Force’s readiness recovery? Are there areas that cannot recover even if provided additional resources in the future? What is the one thing Congress can do to improve USAF readiness?

General GOLDFEIN. The capability gap is closing. Today’s focus on counter-insurgency in a permissive environment limits our opportunity to train against a high end threat, and our adversaries are not standing still. They continue to invest in high end capability and they are catching up.

The biggest obstacle in the Air Force’s readiness recovery is the Budget Control Act (BCA) and sequestration. The Air Force’s readiness recovery depends on the steadfast commitment to time and resources to achieve our readiness recovery goals. All areas can recover if provided sufficient resources and opportunities to train across the entire range of military operations.

BCA and sequestration have resulted in tens of billions of dollars of lost buying power as the Air Force has been forced to make extremely difficult decisions to balance today’s readiness against tomorrow’s capability. We need repeal of the BCA.

Ms. BORDALLO. If near-term readiness is a priority, what actions or resources are being applied to near-term readiness recovery efforts?

General GOLDFEIN. Readiness growth cannot be accelerated substantially with resources alone while ongoing rotational deployments continue to consume readiness. The Air Force requires sufficient and predictable funding, along with increased manpower in critical skills areas, and improved deploy-to-dwell time to improve readiness. Today, we are working closely with the Combatant Commanders to maintain deployment levels at or below readiness recovery rates.

Ms. BORDALLO. The latest projections for rebuilding readiness are based on setting the conditions for readiness recovery in FY 2020. What tangible measures can you point to that suggest conditions will be set in 2020, particularly in terms of operational tempos?

General GOLDFEIN. The Air Force’s plan provides the resource foundation from which to begin growth in FY20 if deployment conditions improve. We will regularly analyze actual conditions and adjust the resource plan accordingly, but the readiness enterprise depends on consistent, predictable funding. The Air Force will fulfill Combatant Commander requirements, recognizing that a high deploy-to-dwell rate consumes full-spectrum readiness.

Ms. BORDALLO. What, if any, mitigation plan does the Air Force have to meet combatant commander requirements if the conditions for readiness recovery (decreased deployments/operational tempo and predictable funding) are not set in 2020?

General GOLDFEIN. The Air Force will continue to meet Combatant Commander requirements to the best of our ability. Senior Department of Defense leaders have made restoring joint readiness a top priority; and we continue to work closely with them to ensure readiness is restored as quickly as possible. Global Force Management reforms implemented within the past year include consideration for force element readiness, and they appear to be a promising initiative in assisting with our readiness recovery.

Ms. BORDALLO. Are there particular service core function areas that are more at risk than others, in terms of their readiness recovery efforts?

General GOLDFEIN. The core functions at greatest risk are those under the greatest demand relative to capacity of equipment or personnel (supply-demand mismatch). This dynamic prevents growth due to constant loss of readiness during rotational deployment (Example: Command and Control (C2)). Similarly, core functions with complex training requirements or very long-lead resourcing requirements are also at risk due to the long timelines associated with the development of proficiency in complex tasks or acquisition of materials (Example: Personnel Recovery (PR)).

Ms. BORDALLO. There are several communities within in the Air Force that have deploy-to-dwell rates below the Secretary of Defense’s goal of 1:2, and some stressed career fields have rates of 1:1. How does the Air Force intend to increase dwell time

for personnel in its stressed career fields while still meeting combatant commander demands?

General GOLDFEIN. The Air Force has several unique capabilities that are low in supply yet very high in demand (Personnel Recovery, Intelligence, Air Battle Managers, etc.). We comply with SecDef policy established in the Guidance for the Employment of the Force (GEF) to maintain an active component deploy-to-dwell goal of 1:2 with a threshold of 1:1. As a result, 90% of the Active component met 1:2 or better deploy-to-dwell in FY15. The FY17 Baseline Global Force Management Allocation Plan (GFMAP) sources all force elements within readiness recovery thresholds to meet Combatant Commanders' most important requirements.

But we remain concerned. Without predictable budgets at levels that allow us the flexibility to balance capability, capacity, and readiness, we cannot recover full spectrum readiness.

Ms. BORDALLO. What is the plan to get the current deploy-to-dwell ratio to a maintainable level? Is there a total force solution to this?

General GOLDFEIN. The Air Force's plan is to fill Combatant Commander requirements at a regain readiness rate in compliance with SecDef policy established in the Guidance for the Employment of the Force (GEF). The FY17 Baseline Global Force Management Allocation Plan (GFMAP) will source all force elements within readiness recovery thresholds. Exceptions to this policy are only granted in rare cases and at the 3-star level or above.

Yes. The Air Force fully integrates the Reserve Component into sourcing global combatant command requirements. Lack of access to the RC, either in activation authority or funding, will severely impact USAF's ability to meet Combatant Commander demands while still maintaining regain readiness thresholds.

Ms. BORDALLO. To what extent is the Air Force's flying hour program properly sized to support completion of training requirements?

General GOLDFEIN. The FY17 Presidents Budget capped the Air Force's peacetime Flying Hour Program (FHP) to 92% of the minimum required flight hours. The Air Force is currently unable to execute the minimum required flight training to sustain readiness due to limits in capacity in several key areas. These areas include: the lack of the proper number and skill level of Airmen in critical areas (i.e. aircraft maintenance, aircrew); continued high OPSTEMPO; and consistent high demand to deploy forces. These factors, levied against a reduced force structure, limit our opportunities to train and build readiness.

To build readiness, the FHP will need to be expanded. But before the FHP can be successfully expanded, several limiting factors must be rectified. These factors include: improving manning in critical skill areas (i.e. aircraft maintenance, aircrew); better management of OPSTEMPO; and limitations to the demand to deploy forces. Incremental improvements in these areas plus adequate sustainment and training resources will eventually allow the AF to expand the FHP to the minimum requirement (100%) and beyond to build and sustain a ready force.

Ms. BORDALLO. In instances where the Air Force has been unable to execute its flying hour program, what factors contributed to under-execution of the program?

General GOLDFEIN. Two key factors contribute to the Air Force inability to execute the full FHP requirement: 1) ongoing rotational deployments in support of ongoing combatant command requirements reduce opportunity to execute home station flying hours; and 2) manpower shortfalls in key areas of the maintenance enterprise impede the Air Force's ability to generate training sorties at the levels necessary to execute a full flying hour program.

Ms. BORDALLO. Is the current range and air space infrastructure sufficient to meet the training needs of the Air Force? If not, what aircraft are most affected by range and air space limitations?

General GOLDFEIN. No. We are currently limited in our ability to provide relevant and realistic training to 4th Generation and 5th Generation aircrews; because our live environment cannot fully replicate the conditions they may encounter in future conflicts. Our limiting factors include a lack of realistic threat density, limitations on spectrum use, and the increasing footprints required for new weapons and weapon systems. We are investing across the FYDP to upgrade our threat replication capability and develop better synthetic training capabilities.

Ms. BORDALLO. Are any additional training resources, such as adversary air for training purposes, required to support fifth generation or legacy aircraft?

General GOLDFEIN. Yes. Live adversaries using realistic threat tactics with appropriately sized threat presentations and realistic ground-based threats, range infrastructure, and target sets capable of emulating potential adversary defenses are required to provide relevant and realistic high end training for 4th Generation and

5th Generation aircrews. Additionally, systems capable of emulating adversary jammers would further enhance live training.

Ms. BORDALLO. What plans, if any, does the Air Force have to make investments in training resources before additional 5th generation squadrons reach initial operational capability status?

General GOLDFEIN. The Air Force has significant plans to invest in live, virtual, and constructive training environments; live capabilities such as ranges, threats, adversary air, and electronic attack; simulation capabilities to include a timely fielding of F-35 Full Mission Simulators; and a robust investment in Distributed Mission Training capability. Air Force plans for constructive capabilities include technology demonstrators such as the Joint Synthetic Environment (JSE); a synthetic training environment that will enhance future 5th generation training, and Secure Live Virtual Constructive Advanced Training Environment (SLATE); which is a live training environment with synthetic input that will integrate Live, Virtual, and Constructive training environments.

Ms. BORDALLO. If the current operational tempo were to increase, what would be the effect on readiness?

General GOLDFEIN. If operational tempo increases, we would expect a further reduction in full spectrum readiness. High operations tempo substantially reduces our units' opportunity to train for its FULL mission set. A higher ops tempo would further reduce our opportunities to train.

Ms. BORDALLO. To what extent are weapons shortages affecting prepositioned munitions inventories, and consequently readiness to address other potential conflicts around the globe?

General GOLDFEIN. The increased expenditures of certain munitions, along with known budgetary constraints since the August 2014 start of Operation INHERENT RESOLVE (OIR) have resulted in reallocation of some munitions stocks from pre- and forward-positioned locations to the point of need. Replenishment of those stocks will occur through existing Air Force munitions prioritization and positioning governances. Inventory levels for Precision Guided Munitions will continue to decline until new production increases.

Ms. BORDALLO. How, specifically, is your current budget request balancing the short-term requirement to repair or rebuild equipment with longer-term efforts to replace that same equipment with next-generation equipment?

General GOLDFEIN. This year's budget prioritized capacity and readiness over modernization. We sacrificed investments in next-generation capability (F-35, C130Js) to fund readiness, grow capacity in manpower, and to keep force structure. For example, we are growing end strength to 317,000 on a path to 321,000. Also, F-16C/D models will undergo multiple offensive and defensive upgrades to ensure capability and survivability in the current and future threat environments, as the F-35 comes into the field in greater numbers.

Ms. BORDALLO. Do you have a strategy that ensures you do not unnecessarily reset equipment you plan to replace? If so, does that strategy present any risks to readiness? Please explain why or why not.

General GOLDFEIN. We have a very robust reset and refurbish plan for our equipment. All of our major end items like aircraft and engines have structured lifecycle management plans to ensure we get the best value when deciding whether to overhaul, modernize, or purchase new. For our aircraft we use an economic service life analysis to determine whether to overhaul, extend the life, or retire and buy new.

We apply similar methods for other equipment where we properly balance decisions between refreshing equipment, redistributing between units, and buying new equipment. This approach ensures the maximum service life of our equipment, and prevents a large reset bill.

Ms. BORDALLO. To what extent are reset efforts and schedules aligned with unit training plans and supporting, or hindering, the achievement of overall unit readiness?

General GOLDFEIN. High operations tempo (deploy-to-dwell ratios below 1:4) hinders our ability to effectively synchronize and schedule training events to achieve full spectrum readiness. The current ops tempo has compressed training timelines across most Air Force communities; forcing units to focus on their next deployment and assigned missions, versus completing the training curriculum for all of their designed operational capability tasks.

QUESTION SUBMITTED BY MR. GIBSON

Mr. GIBSON. How many Joint Forcible Entry Exercises are in the FY17 AF budget?

General GOLDFEIN. The Joint Forcible Entry Exercise (JFEX) is now known as the Joint Operational Access Exercise (JOAX). While the JOAX is not a specific line item in the FY17 President's Budget, Air Mobility Command uses Operations & Maintenance funding to support four JOAX.

