



Mitchell Institute for Airpower Studies

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Dr. Grant: Welcome everyone. My name is Dr. Rebecca Grant. I am pleased to be the Director of the Mitchell institute of the Air Force Association. It’s my job to welcome you today.

Of course we are all here to hear General Breedlove talk about AirSea Battle, but I’m going to take just a few minutes and tell you why we’ve called you here for this occasion. It’s really because AirSea Battle began this week, 90 years ago, when Army and Navy and Marine Corps flyers joined together for the first live fire tests of how airplanes could sink capital warships at sea. This is something that really had not been done up until that point in time. The tactical problem was this. It was a big one in the debates of the day. Was it possible for aircraft to deliver bombs accurate and heavy enough to open the hulls of a ship like the *Ostfriesland*, which was a captured German dreadnought? It had four seal skins, watertight compartments, a very formidable vessel. Or would you have to rely in coming conflicts on naval gunfire which had a proven ordnance to do this kind of work. So was it going to be airplanes or ships in the future? This was one of the biggest questions in the defense debate of the day.

Shortly we’re going to welcome General Breedlove and he will give us his insights on the ongoing efforts of today, in the 21st century, to prepare the Air Force and the Navy for AirSea Battle on a scale that the aviators of the 1920s could scarcely have imagined. They might have seen glimmerings of it, but not much more than that.

Of course the reason we’re marking this is because the Mitchell Institute is set up to honor, in part, the legacy of Billy Mitchell but particularly his focus on wartime operations, on testing of new concepts in air power, and his impact on future Air Force leaders. That’s why the Mitchell Institute is named for him and it’s that legacy that we promote with events like this and with timely research and scholarship on air power topics. Air power, as always, included air and space and cyber.

So it has been 90 years ago tomorrow that the *Ostfriesland* sank. We’re talking about nearly a century that separates Billy Mitchell’s work from the work of AirSea Battle

today. And I think looking back there are four things that really unite these efforts and draw it across a period of many decades, many technology changes.

The first of them is, it was a joint effort. I wonder if many of you know that this bombing exercise was entirely under the command of Capt. Alfred Johnson, United States Navy, who supervised all the work of his flagship the *Shamat* about 50 miles off the coast of Hampton Roads. That's the first thing.

The second was the important focus on technical problems and acquisition. I don't think they called it that in the 1920s, but we all know what it means. There was a lot of rapid fielding of capability and a very intense focus on improving aircraft weapons and communication in order to get the desired effect. Mitchell's challenge in getting his provisional air brigade ready to participate in these Navy-led tests was partly just to get enough aircraft down to Langley, get the modifications in the bombs. He worked hard to modify the Martin bombers. And train his crews to hit that skinny oval of a battleship seen at sea. He also used dirigibles for reconnaissance, which was as vital then as it is today. And of course he had provisions for rescue at sea. These dirigibles were equipped with rope ladders that could be lowered to rescue an aviator in distress.

Two more points that link these efforts. The third being the impact on future leaders. Among the Navy aviators who attacked the *Ostfriesland* was a young lieutenant named Felix Stump. He was later a carrier skipper, a task force commander at the Battle of Leyte Gulf and eventually the four-star commander of Pacific Fleet in the 1950s. Among the Marines was a major by the name of Roy Geiger. That should sound at least dimly familiar to many of you. He was much better known as Maj. Gen. Roy S. Geiger, Commander from September 1942 of the Cactus Air Force on Guadalcanal. Both of these as very very young aviators participated in this unique series of tests.

And of course assisting Mitchell along with many others was a still fairly young pilot named James Doolittle who would find his first international fame on the mahogany decks of CV-8, the USS *Hornet*, launching the raid on Tokyo.

Finally, I think the things that really unite what went on 90 years ago with what we see going on today is the investment and the priority that senior leadership have poised on these efforts. Back then it was Secretary of the Navy Josephus Daniels and Secretary of War Newton Baker who guided the first initiation of these tests. They were very controversial, but in the end these two lions who had both been in their job since 1916, and had guided America through World War I, agreed that it was important that the Navy and Army participate together in these experiments with the battleships.

So by this week in July 1921, success was already enhanced. The Navy and the Army aviators together had already racked up a good tally of shipping. They'd sunken U-boats, they'd sunk a German destroyer, and on July 18 they had sunk the cruiser SS *Frankfurt*. So the attacks on the *Ostfriesland* began 90 years ago today, on the afternoon of July 20. There were thunderstorms in the forecast, and indeed the weather got so bad that the observers on the ship, most of them wanted to put into port and

things were canceled for the rest of that day. John Pershing, who was the Army Chief of Staff, was flown down — probably not flown down in those days. He probably sailed down. Had gone down to watch these tests. He did not want to get back on the ship to go out and watch the second day, so he remained on land. As the attacks launched again it was special ordnance developed to create a [caticating] pressure not on the *Ostfriesland* but near it in the water, that sank the *Ostfriesland* at 12:39 on July 21.

Mitchell said by the end of 1921 the American Air Service had conclusively demonstrated what could be done by air forces against sea craft. To cap it off, in 1922 the United States Navy placed its very first orders for two aircraft carriers.

That's what experimentation and tight focus did 90 years ago. Now, to tell us about the evolving concepts of AirSea Battle today I'm pleased to welcome General Phil Breedlove, whom you all know, our Vice Chief of Staff of the United States Air Force.

Thank you very much for being here.

[Applause].

General Breedlove: Thanks, Rebecca.

It is a great and an auspicious anniversary that we celebrate. The story that was told is really quite remarkable. I think the actual name was Project B, called Project B, and the *Ostfriesland* ended up on the bottom, making a reef out of it. That was a great outcome for our air forces of the future.

Quite frankly, the successes of Mitchell on that day sort of opened the door to what we saw happen in the opening days of Gulf-1, Gulf-2, and others along the way. So we owe a lot to that. And it's a good precursor to the fact that we in the Air Force now have the Commander-in-Chief Trophy back in our hands and have demonstrated our ability over these kinds of forces again. [Laughter]. So we want to continue that into the future.

Although it's a little hard for me to celebrate that since my own Georgia Tech lost in the bowl game to the other half of my love.

Here we are to talk a little bit about several things. We will tough on AirSea Battle, but what we want to talk about is the evolving thoughts that Billy Mitchell started in this endeavor, and quite frankly, have now morphed themselves into our ability to prosecute al Qaeda and episodic radical Islamic influence around the world. How we get from sinking a battleship to being able to be very precise, very timely, and very limited in achieving objectives that can be every bit as strategic in these surgical operations that we do today. But all born in what Mitchell did during this time.

We have to complete this job. You all know that it's not finished. We have a lot to do yet in Afghanistan. Iraq appears to be a continuing source of concern and we'll have to address that. And you know that we play a big part in what's going on in Libya. We are

watching, helping and enabling those who have come along with us in this great air power journey that started with Mitchell as NATO does a great job at prosecuting that piece of work.

As we look forward to the medium and long term, though, we're going to see threats to stability posed by a lot of different possibilities in the future. Revisionist regional powers, as we see now. Nascent nuclear nations, nations that continue along a path that put them at odds with our vision of a future world. And quite frankly, the proliferation of advanced technology. We're in a tough spot now. We see near peers or peer competitors beginning to build similar capabilities in stealth, similar capabilities in long range strike, similar capabilities in missile technology on their aircraft. These countries have money and they have a very deliberate plan which they are good at executing, and they will bring pressure to our advantages across the world, all at the same time, as you know, we are coming under increased and what seems to be prolonged fiscal pressure that will challenge our ability to remain ahead of that curve, to remain ahead of the technology curve that has put us in a position of advantage as we have faced competitors in the air in the past.

So we will have to reach back into the roots of Billy Mitchell's thinking and how can we think our way through some of these issues where clearly we will not be able to buy our way through some of these issues in the future.

Our task for balancing the force for these threats would be very daunting, even in the Reagan buildup years, and now will come under great pressure as we face a very different environment.

As the challenges emerge, though, our nation and our Air Force still is in a position to make the point around the world that you do not want to fight a nation who controls the air. Whether that air comes from any component is not really important, but you do not want to face a nation that controls the air. Our peers and our competitors understand that.

In our fiscal planning we need to think about our impact to the nation's deficit and how that competes with the fact that we have near peers who are out there pushing this envelope. We know that we in DOD and we in the Air Force will be a part of addressing our nation's deficit. How will that affect that gap between us in an uncertain strategic environment is the problem of the day.

The debt reduction plan envisions reducing our spending, as you know, by over \$400 billion across the next 12 years, about a 7 percent cut. I think those of you in industry understand what that means. That's a 7 percent real cut, not to include inflation, not to include the other rising prices of internal pressures. So the effect on our Air Force will drive us to decisions which are going to be tough across the next few years.

The savings we have to reach will not come easy. Those of you who I know in the audience, who have flown with me for the last 30 years, have watched as we have retired

over 1,500 older aircraft, canceled major acquisition programs and deferred much-needed military construction just to get to where we are. To the beginning of now this problem that we face.

So the last time that we entered into a fiscal drawdown we were coming out of a period where we had recapitalized much of our Air Force. Now we will go into a fiscal period which challenges us at a time when we're flying the oldest Air Force we have ever flown. The oldest Air Force we have ever flown, in a time when we need recapitalization more and more. So we have challenges that we need to face together. Many of you in this room are a part of that royal "we". As manufacturers, as producers of our nation's weapons, you've heard our Chief say it. We need to produce on time, on budget, and to the spec that we ask for so that we can get the most value out of every dollar that we get to spend in this challenged piece ahead of us.

It doesn't fall on deaf ears here that we need to recapitalize our aging tanker, fighter, bomber and missile forces. We are in the process of and need to continue to modernize our satellite constellations. The world has come to expect service from American satellites.

Meet dynamic requirements in the cyber domain. The challenges in cyber domain will only exponentially grow.

And bottom line, replacing aging airframes from fighters to pilot training to vertical lift, we have issues that we need to work.

If we are to survive this period and come out of it with an Air Force that America's people will recognize in ten years, we're going to have to focus on what are those core, distinctive Air Force missions. We can't afford to be branched out into things that are what we might call fringe or unique. So we will be looking to how do we draw back to those things that uniquely the Air Force provides for America?

When examining such missions, roles or capabilities, many ask what is it you're going to focus on? What are those unique contributions to national security? The Chief and several of the senior leaders of our Air Force have sort of put that into now what we are calling the four-plus-one construct. Those of you who have looked at the Chief's vector will probably recognize them.

The first one being domain control. Domain control across air, space, cyber. We have to be able to operate in and control those spaces.

I would argue now that we certainly can exploit and control airspace. No other nation in the world, and certainly as a coalition, no other coalition in the world can at this time push us out of that domain. I would offer that is not a given into the future, based on some of the challenges that we have out there.

In space, we are very good at operating in space. But to say that we can exploit or control that domain, I would think is not where we are. But we as an Air Force and a space force need to be looking to that capability.

In cyber, we are far from the top three in being able to exploit or control the cyber space. We lag in many ways. We're going to have to catch up.

The second of these critical contributions of our Air Force reaches all the way back to what Mitchell talked about. That is holding any target on the globe at risk at the time and method of our choosing. We'll talk more about that in a few minutes as I talk about the relationship between AirSea Battle and long range strike. But it is a key tenet of our Air Force to be able to hold any target on the globe at risk, strike it when we can, and strike it when we want to and how we want to.

The third of the tenets is providing responsive and full spectrum ISR. It's a great pride of our Air Force that we have now built a fighting force from all the services and from our coalition that expect from us and will continue to expect from us exquisite knowledge of the enemy and what's going on in their battlespace. It is a tough job and an expensive job to do. In fact you have heard me say, a few of you, in several forums, that the number one manning problem in our United States Air Force is manning our unmanned vehicles. This enterprise that we have created in ISR is something that we owe our nation and owe our combat troops on the ground and on the sea. We'll have to continue there.

The fourth tenet, clearly, is rapid logistics. Nobody in the world can do it like we can. Nobody can move men and material to the fight like the United States, and then refit, refurb and rearm in place the way that we do. I think the greatest example of that are some of the fighting positions in Northeast Afghanistan. Fighting positions that you can't even reach by trail. We are now using precision airdrop to bring them every bit of sustenance and fighting capability that they have. It's a great example.

So domain control, holding targets at risk, full spectrum ISR and rapid logistics, and the plus one is exquisite command and control to wrap it all up together.

The ability of our AOC and our teams to bring the strike responses that we have in Afghanistan to our ground troops, getting ordnance on target, on time, immediately nearly, to reach our troops' requirements when they're in battle. We owe that to our nation and we owe that to our fighting forces on the ground and in the sea.

So those four plus one will be sort of the things that guide our Air Force as we make these tough decisions in the future.

You can expect that the fiscal pressures will bring us to a lot of decisions about rebuilding and modernization inside of those areas, and recapitalization where we can afford it.

So just a few thoughts on AirSea Battle.

No fighting force can succeed apart from a joint, and I would also argue, a coalition effort. We have to work together. Our nation's Air Force and our nation's Navy with the Marines embedded have some very unique, very global applications. We find a lot that bind us, that bring us closer together as opposed to push us apart.

We will succeed or fail in the A2AD [anti-access/area denial] environment as a joint team with our naval brethren. We are the two services that in an instant can bring strategic effect to the enemy, and how we draw those two forces together to make those strategic statements, sometimes without kinetics, merely by presence, merely by knowing that we can hold a target at risk where we want to at any time is a strategic deterrent, and that has nothing to do with the nuclear mission. The conventional capability to reach into a target area and take those targets when we want is a strategic effect.

I began by talking about how Mitchell's sinking of the naval vessel helped our Air Force. I'd like to sort of finish by saying that these naval and air arms teams, this partnership, and this ability to reach across former barriers of what is a naval mission or an air mission will make that difference in the future.

Institutionally, we have four-star teams of planners together, and quite frankly, right now as the budget comes down we are forcing our budget planners together. A year ago, actually about 18 months ago when I was the A3/5 and we were asked to stand up this AirSea Battle team and to start to plan, even then, 18 months ago, we had a very different fiscal outlook. That set expectations of what we might do as a team together and how we might pile on each other's capabilities or make use of each other's capabilities, and quite frankly, to cover maybe holes in each other's portfolios. Those sets of thinking are even more important now, because as we both draw down in some of these areas, we have to make sure that some of those things that worried us about our institutional interaction don't now become uncovered.

Our concepts will have to be even more key. The old saying of "We have run out of money so now we must think", becomes even more important in this relationship now. The thinking piece. The tactics, techniques and procedures, the practice, the interaction of our aviators in the air and our aviators and naval shooters afloat will be ever more important.

Finally, you don't have to look farther than the JSF to see how we are going to have to materially cooperate in order to get to the future that we need with fifth generation strike air.

One of the primary things that came out of our discussions in AirSea Battle was this need for the ability to have long range strike of some form. All of our thinking began to mirror, parallel and support thinking also in the department about long range strike.

Long range strike became one of those things that AirSea Battle said that our nation needed.

Long range strike is a core capability that I talked to you about our Air Force mission and where we would have to look when we began to skinny down our focus. Long range strike in some form overcomes area denial measures. It allows us to penetrate from lightly contested to severely contested airspace and networks, and assures us the freedom to do those things that we talked about in domain control to affect the air, space and cyber domains.

Ultimately it meets that core tenet that we talked about of holding any target at risk anywhere in the world. To this end we worked with OSD in developing our concept of this long range strike family of systems, to allow us to carry this capability into the next generation of Air Force systems. That family of systems I think gives us increased flexibility among mission sets, strike, ISR, airborne electronic attack, enhanced survivability, multiple systems providing enhanced survivability with deliberately pre-planned redundancies in some places.

More adaptability over time. A family of systems is easier to adapt than any one component of that family. How do we grow, adapt or change the starting premise to make this family meet the changing threat environment and the changing target environment? Our opponents are digging deeper and deeper into the ground. We can't rest on the weapons and the capabilities of the past to be able to address those.

Finally, greater affordability by avoiding single sort of Battleship Gallactica solutions. Affordability.

This family of systems will be evolutionary and it will balance existing, evolving and new capabilities. And central to the family is this notion of acquisition of a long range penetrating bomber aircraft. Some of you have heard me say the basic tenets of that aircraft. I'll just repeat them for the crowd. We see it as being optionally manned and capable of conducting precise nuclear and conventional strike. It will start out conventional.

The long range strike bomber will be designed and developed using proven technologies. As we have talked to the potential competitors for this business, where we want to start is today. We don't want to lean very far forward. We need to be able to afford this system so that we can buy 80 to 100 of these platforms. We cannot find ourselves, while the B-2 is a magnificent capability and has proven itself very recently, quite frankly, we need more than 21 of these new aircraft, so affordability is a key parameter.

The bomber will not be an exquisite lone wolf platform capable of accomplishing all the missions by itself. It will rely on the family in many cases.

Rather, it will be a part of that entire family of systems, relying on off-board capabilities as well as its own to accomplish its mission.

Long range strike is a capability the nation currently depends on. We have used it well in the battle that we have done in Libya, Afghanistan, and Iraq. We will continue to need this capability into the future.

Long range strike, as I mentioned before, is a valuable deterrent effect even in the strictly conventional role and offers our nation's leaders the ability to strike, again, anywhere and anytime they want. Central to AirSea Battle, it's a family of systems that allows us to penetrate that A2AD environment and hold our enemy at risk. The long range strike aircraft will be central to that.

I don't want to paint too gloomy a picture up here about fiscal challenges. The great good news is there is a magnificent team between our Air Force and the airmen who maintain and aviators who fly all of our systems from satellites right through to our Tac teams. The other members of that team, some of you are here, our nation's industry and its ability to adapt to these lean times and come alongside the Air Force to meet the requirements that we need in order to bring the combat capability to our airmen and to the joint and coalition teams that we fight with.

There are a lot of challenges. Others would say there are a lot of opportunities. Where you come down on that will sort of drive what you do in the future.

I believe that we can combine the Air Force's unique asymmetric contributions to the national defense with the complementary capabilities that we find in our joint coalition brethren. I think that we will succeed as we have in the past, but we will just have to be a little more frugal about it as we go along.

I appreciate the time to talk with you today. I'm sorry I can't stay around for questions. I look forward to seeing some of you in the halls of the Pentagon. As I was in before I came here, I will return to a budget discussion of how we're going to make it through the next five years without \$49 billion. [Laughter]. So we're about to present some of those options to our Secretary and our Chief and I go now to prepare to defend my stand in the last ten days of my life worth of work.

Thank you very much. [Applause]

Dr. Grant: Thank you very much, General Breedlove. We appreciate your time and understand you need to get back. Thank you.

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