

Speech by General Richard E. Hawley

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to National Defense Industrial Association's 1997 Armament Symposium

Oct 30, 1997

It's great to be with you this afternoon. I apologize for being a couple minutes late, but I think the intros went real quick so we're just about back on schedule. We were over with the 33rd wing having a lot of fun at a luncheon where we presented the Shine Award to one of our premier young fighter pilots with the "Nomads." For those of you who don't know about the Shine Award, I feel obligated to tell you a little bit about it because it is quite a story.

Tony Shine crashed in an A-7, 25 years ago in Southeast Asia and his family of course, like so many others, thousands of families, had no idea what had actually happened to Tony. The Shine Award is the story of a family that wouldn't quit, because they had to have an answer. Tony Shine's wife, and then Tony Shine's father and then Tony Shine's daughter, Colleen, pursued that effort to find out what happened to Tony Shine for 25 years, until about a year ago when Colleen Shine, now 33 years old, the same age her Dad was when he crashed, went to the crash site in Southeast Asia and found her Dad's remains. It is a wonderful story of dedication and devotion of a family to their father, husband and son. When you attend that ceremony, you can't help but be touched by that entire story and by the fact that this family now sponsors this wonderful award to recognize a great young fighter pilot with those traits of character that Tony Shine brought to our Air Force.

So that's a great story and I wanted to share it with you. I guess the theme of this conference is, "The Next 50 Years of Air and Space Power." That's a great theme. It reminds me of a story about Winston Churchill. This event occurred on the 30th of November 1949, and it was Churchill's 75th birthday. There was a photographer there who was taking a lot of pictures and he came up to Sir Winston and said, "You know, I hope I have a chance to take your photo on your 100th birthday." Sir Winston looked at this young photographer and he said, "Well, I don't see why not young man. You look pretty healthy."

Well, Sir Winston didn't make it to 100, but there's no doubt that air and space power is going to make it to a 100th, and that the U.S. Air Force will. And when it gets there, it will undoubtedly take a form that most of us can only dimly imagine. We're going to have directed energy weapons in the air and on orbit. We'll have surveillance and reconnaissance systems, manned and unmanned, in the air and on orbit, that will fulfill our recently retired Chief's vision, Ron Fogleman's vision, of an air and space force able to find, fix or track, and target anything that moves on the surface of the Earth.

We'll have command and control systems supported by a global grid of information that will enable near-instantaneous reaction to any event of consequence to our nation, actual or man-made, terrestrial or extra-terrestrial. And weapon systems able to deliver precise, lethal and sustained fire power or humanitarian relief to any spot on the Earth within hours of the call. When we've traversed that next 50 years of air and space power, I hope we will find an Air and Space Force, or perhaps a Space and Air Force filled with the same kind of well-trained, highly motivated, exceptionally talented men and women who have made today's Air Force the world's best and most respected. Men and women like Tony Shine and Jeff Harrigan, who just won the Tony Shine Award.

Well, I'm not here to share my guesses about the shape or size of that future air and space force, because as the Commander of Air Combat Command, my concerns are much more immediate. You read about them almost daily. They center around things like an increasingly competitive labor market that taxes our ability to recruit, train and retain the people who produce airpower for our nation, flyers and non-flyers alike.

An aging inventory of equipment, in the air and on the ground, that requires increasingly intensive, and might I

add, expensive, efforts to maintain at our required levels of combat readiness. And a pace of operations that approaches four times the pace that we maintained with a force nearly twice as large as today's during the Cold War years.

So the challenge as I see it is to get from here to that future that we can't see very well without getting hopelessly lost enroute. Our problem is not unlike that of the "wing walkers" of aviation's early years, people who hoped fervently to get the next wire firmly in hand before letting go of the one that they had.

Now our Air Force answer to that challenge is to find ways to improve our ability to quickly identify and integrate new technologies into our force, and we've done that in a lot of ways. We began it, as all of you know, about five years ago when we formed Air Combat Command, the command I'm privileged to command today. When we combined all of the "shooters," if you will, the fighters and the bombers, into one command, along with all of the Air Force's airborne intelligence, surveillance and reconnaissance platforms and their exploitation systems. And of course, our search and rescue force.

We pulled that all together into one command so that we could begin to integrate air power as air power needs to be integrated, in a way that we have not done through most of our first 50 years as an independent service. Today, we're seeing the fruits of that decision, the decision to pull that force structure together into one command, because we are really beginning to open up some of those "Stovepipes" that frequently knew very little about one another's mission, or how those missions were executed. We're seeing those stovepipes come together. It was amply demonstrated very recently when we deployed another of our new inventions designed to help us cope with this rapidly changing world, an Air Expeditionary Force. An Air Expeditionary Force that we deployed to Bahrain complete with fighters, bombers and tankers.

While I was recently in Southwest Asia, and was visiting our ambassador to the country of Kuwait, we had a discussion about the important role that the bombers play in our ability to respond to crises around the world. I described for our ambassador some of the capabilities that this newly emerging bomber force brings to the fight as we complete its conversion from a primarily nuclear deterrent force to a conventionally oriented bomber force. The Ambassador got very excited, and he came up with a great idea. It just shows that not all great ideas about military things come from military people.

It had been our intent when we deployed that AEF to Southwest Asia to have the B-1's that were part of that force, attack the bombing range in Kuwait and demonstrate their "Global Reach-Global Power." But, as sometimes happens, we had some coordination problems and by the time the bombers got into the theater they were about out of gas and they had to press straight on to Bahrain and land. The Ambassador was rightfully disappointed -- we hadn't been able to execute that mission in a timely and effective way.

So I said, "Mr Ambassador, we're ready to come back and do it again. You work out the coordination with the Kuwaiti government and those bombers will be there." And he said, "You know what I'd really like is, I'd like a video of some of the capabilities that you described for me today, and I'd like to put that on Kuwaiti TV after the bombers do their thing on the ranges, because you know what General?" He said, "The most watched TV station in Basrah, where most of the Iraqi armored forces are that would be at the spearhead of another attack into Kuwait, the most watched TV station there is Kuwaiti TV."

What a marvelous idea! Well, we got on the phone right away and we got this video put together. We sent it to the theater, and about ten days later those two B-1's that we deployed to Bahrain came across the Eudari Range in Kuwait, each of them delivering 14 MK-82's, smack on ToT, and spot on target -- a set of tanks out on that range. That evening on Kuwaiti TV, they showed this film of B-1's dropping a string of 30 sensor-fused weapons on a column of tanks, followed by a film most of you have seen, of some B-2's dropping guided air munitions on an array of 16 targets last October 8th out at Nellis. What great psychological warfare! And it was the Ambassador's idea.

Now I tell that story because there's a lot of folks in this room who aren't military. Or were military and are now doing other things. You've got a lot of great ideas that you need to bring to the table, like the Ambassador did for me, so that we can execute them and make our Air Force 50 years from now, make air and space power 50

years from now, live up to that vision that a lot of people have today.

The AEF that I just talked about is part of our way of helping you bring those ideas too, because the AEF, perhaps for the first time in my career, has pulled together all the different elements of air power -- from the fighter squadrons on the ramps of Langley and Seymour, to the airlifters at Charleston and McGuire, to the tankers at MacDill and Mildenhall, to the ground tactical air command and control system, to command and control elements, all the things that have to come together to deliver air power for this country. All of those come together in an AEF, and they come together with an ability to put bombs on target or missiles in the air within 72 hours of a cold start, no warning notification. With a little strategic warning, they can have bombs on target halfway around the world in 48 hours.

Now a lot of you who used to be in the Air Force remember that if you were in a fighter outfit your DOC statement said that you were going to be ready within 24 hours. Now you're sitting there saying, "What's he so spun up about? That he can get bombs on target in 48 hours?" Well, I'm here to tell you that in my career we never got a squadron marshaled, deployed, set up, ready to go with bombs on target in 48 hours.

We may have been ready to go in 24 hours, but getting that airlift force in there, getting the tankers coordinated, getting the "DIP" clearances put together and all the other things that it takes to get a force into a theater, properly deployed, properly equipped, ready to relaunch and put bombs on target in 48 hours is no mean trick. It takes a lot of coordination between Air Mobility Command and ACC, or in the case of a force deploying out of Europe or the Pacific, USAFE or PACAF. We can now put that force together and accomplish all the needed coordination and integration to make an AEF work.

Now there are those of you saying, "Hey, we had OPLANS --we had all these plans that said do it." But I'm telling you, getting it done the way we're doing it today, routinely and with no-notice is something that's a little new. We exercised it to Alaska recently on a true no-notice basis. In fact, it was so no-notice that I got an immediate call from my Ninth Air Force commander saying, "What the hell are you doing?" He didn't know anything about it and we sent his forces with zero notice to put bombs on target in Alaska and then join in a Cope Thunder Exercise; and they responded and delivered those bombs 71 hours after initial notification, with all the requisite tanker support, all the requisite airlift support, based upon the plan we had put together with our sister command, Air Mobility Command. And it worked great.

Battle labs. You've all heard about our Battle labs. We've got half a dozen of them. We just cut the ribbon on the UAV Battle lab this morning. The Battle labs are another way for you to get your good ideas to us, because that's exactly what we've set them up to do. These are groups of a couple of dozen smart people whose only job in life is to go out and "fish" for good ideas. They explore new concepts. In the case of our UAV Battlelab, they're fishing for good ideas on how we in the Air Force can make better use of this thing called an unmanned aerial vehicle.

It's something that most of us in the Air Force have resisted most of our lives just because it was unmanned. After all, if you've got wings on your chest, you view these things as a threat. But we've now seen the light. We've got a Battle lab whose only job is to go figure out better ways, more innovative ways, "out of the box thinking," so that we can use these capabilities that are resident in unmanned aerial vehicles like Predator, Global Hawk, Dark Star, and others that will come along. We can use these UAVs to leverage the rest of our force.

We've come to understand that in this new world we're in, where you don't prepare for the Soviet Union storming through the Fulda Gap, that there are a lot of situations where we are very intolerant of casualties. We don't want to have an airplane shot down. We don't want to have a young man crawling around on the ground in Bosnia, eating worms while we try to go in and rescue him and keep him from being a TV item on CNN. UAVs have a role to play in those kinds of scenarios, and plenty of others as well. So these Battle labs: UAVs, Command and Control, AEF, Space, Force Protection, Information Warfare, all of

these Battle labs are ways that you can bring good ideas to the table. Good ideas that only you have the expertise to see, the vision to see. Like the Ambassador who had the vision to see the power of that film on bomber capabilities, because he was in a position to recognize the potential of that short video clip to influence our adversary.

We just stood up the Air and Space Command and Control Agency. It's another thing we've done to help get us through that transition period. Get us to that Space and Air Force 50 years hence. With the Air and Space Command and Control Agency for the first time, we have a dedicated group of people whose only purpose in life is to get a grip on command and control, not just for the Air Force, but for the joint force commander as well. To get us out of all these "hobby shops" that we've had all over the Air Force, buying and inventing unique command and control elements that don't interface together, that don't look like weapon systems, that don't have the foundation of a training program to prepare people to operate them.

We now have an Air and Space Command and Control Agency to put all that together, and it provides you with a "single point of entry" for the good ideas that lots of you have on how we can better do that very important mission of command and control. Establish that sensor-to-shooter link that is so critical in exploiting some of the other new technologies that are entering the force today.

I talked about the bomber force. The bomber force is a poorly understood capability in our Air Force, and so including them in the AEFs, like we just did to Bahrain, is one of the things we're doing to try and get our warfighters, our CINCs, to understand what the bombers can do for the force. Because the bombers are now gaining the capability to deliver this new family of munitions that is so important to us. Sensor fused weapons, joint direct attack munitions, wind corrected munitions, JSOW, JSSAM; we are now integrating all these weapons into the bomber force. This past Spring, for the first time, we began to deliver that capability to the CINCs when we successfully integrated the sensor fused weapon into the B-1 force -- that was the film that we showed in Kuwait.

It was also a story that I took about a month ago to General Zinni, our new CINC at CENTCOM. I told General Zinni the story of what the bomber force can contribute in a scenario like he faces. Where he has the potential for a very short warning, rapid break out of armor-intensive forces towards Saudi Arabia and Kuwait. He loved it. And I guarantee you, in CENTCOM's next iteration of their OPLAN, the bombers are going to play a very important role.

We're also offering to put bombers on alert. They won't be on 15 minute alert like they were through much of the cold war, but they will be in a posture that will allow us to deliver tremendous firepower on target, any place in the world, within 36 hours from a cold start, or 24 hours with strategic warning. When the CINCs see what this force of bombers can do, this modified force of conventionally capable bombers, able to deliver this new family of munitions that are so central to that Space and Air Force 50 years hence, they like it!

We're about to have something called EFX '98. Now you've read a lot about the Army's war fighter experiments. I visited them and they're a very interesting effort to link ground forces together digitally so that ground force commanders at every level can have the same kind of situational awareness that has made air power so successful over so many decades.

Well, we have to do the same thing in our business, and so we're going to put on something called EFX '98. It'll be here on the East Coast, and much of the activity will be centered right here at Eglin. It will allow us to begin to integrate many of these new capabilities that heretofore we've only been able to exercise in a stovepipe, stand alone fashion. We'll be able to demonstrate some of these emerging technologies so that we can begin to learn how to integrate them properly to deliver globally effective, responsive and lethal air power on the timeline that our CINCs need.

Just as we've done with the AEFs, integrating all the elements of air power required to get a force into a theater, get them bedded down, regenerate them and put bombs on target; EFX will allow us to do that with these new

and emerging technologies that we're seeing across the entire force. Command and control, precision munitions, sensor-to-shooter - all so highly valued.

One more initiative that we are pursuing that I think is going to be very important as we look forward to that next 50 years is something called Distributed Mission Training. Now, when I dreamed this thing up I didn't have a name for it. All I wanted was to take better advantage of simulators. But you know, everything has to have a name. So one day I was being introduced at a session where we were going to talk about simulators and someone said, "And here's General Hawley. He's going to talk about Distributed Mission Training." First I heard the term. So I got up and said, "No, I'm going to talk about simulators." Well, I came to find out my staff called that Distributed Mission Training."

Well, what distributed mission training is, is nothing more than taking advantage of the simulation technologies that are emerging because of advances in computers and displays. What we are trying to do is create a synthetic training environment, using linked high fidelity simulators, so that we can begin to train our force in the high end missions that they have to be able to accomplish when we put them in harms way. Because frankly, as I look around at my force today, and at the training we provide to our people, it is very difficult to adequately train our force at the high end of the conflict spectrum. That spectrum where you have to integrate and pull together all of the various elements of air power in a "seamless" way for air power to be effective.

Why can't we do this without simulation? Many reasons. We can't generate adversary support. We don't have adequate ranges. We don't have realistic threats on the ground or in the air. We can't get all of our forces launched at the same time and marshaled together, except occasionally in an exercise like Red Flag or Cope Thunder. We can rarely get all the command and control, and intelligence, surveillance and reconnaissance assets into play. Why? Because they're too busy. They're too busy doing "real world" work all over the world.

So by providing a linked set of simulators at every fighter base, a 4-ship, because that's the way fighters employ, linked to a high-fidelity bomber simulator at every bomber base, linked in turn to our surveillance and reconnaissance assets like Joint Stars and AWACS, linked to our command and control structure -- our AOCs and our Blue Flag facility here in Florida, then we will be able to train our force the way it will have to be employed. And only then.

We're going to field the first set of four simulators right here at Eglin in about a year, and that will begin the process. We're counting on the people who are involved in that business to deliver this capability to us so we can prove the concept, because I guarantee you no pilot worth his salt is going to accept this at face value until we've proved that it works. Until those pilots are walking out of those simulators sweating and with smiles on their face, we're going to have to be from Missouri, we're going to have to prove it. When we deploy that distributed mission training system, then we will be ready to move forward for those next 50 years in air and space power and become that "Space and Air Force" that we talk about.

So those are some of the things that we're doing. They're all important. They all require the support of our partners in industry. Everything we do requires that support, so we have to work as partners. We've got to get rid of the old adversarial approach that we found in the acquisition world 10-15 years ago. We must learn to work together if we're going to exploit new technologies so that the next time we throw young Americans in harms way, they'll all come home. Thanks for your time today. I enjoyed being with you.