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Senate

DEPARTMENT OF DEFENSE APPROPRIATIONS ACT, 2004

Mr. CARPER. Mr. President, to follow up on the comments of the Senator from South Dakota, he alluded to the presence of over 100,000 United States troops in Iraq. As it turns out, if you look across the globe today, we have United States forces stretched around the world in places and numbers we have not seen for a long time—not only Iraq but Afghanistan, Bosnia, Korea, Japan, Germany, and many other places.

We support the deployment of those military personnel through a combination of sealift and airlift. When I served on active duty during the Vietnam War, we were fortunate in having so many more overseas bases from which we could forward deploy or resupply. Many of those bases are closed today, and we rely instead on a mixture of different kinds of aircraft, military and civilian, and on sealift, a variety of ships to serve as a bridge, a sea bridge or an air bridge, to connect this country to our troops deployed around the world.

The air bridge is changing. In this country we are seeing the retirement of an older aircraft built in the 1960s. The C-141 is being retired. It is being replaced by a newer aircraft, a very good aircraft called the C-17. To date, we have received about

100 of those new cargo aircraft and about another 80 have been placed on order and will be coming into the fleet in the coming years. We have as part of that air bridge C-5s, perhaps the largest cargo aircraft in the world, 74 C-5As built in the 1970s, about 50 C-5Bs built in the 1980s. A third part of this air bridge is the C-130. We have them in the Delaware Air National Guard, and they are in air guards throughout the United States. But it is really those three aircraft—the C-5, C-17, the C-130s—that enable us to resupply our troops and to move our men, women, materiel, and weaponry around the globe.

The C-5 carries enormous amounts of cargo, roughly twice the amount of a C-17, at distances roughly twice the distance of a C-17, even more cargo than a C-130 and greater distances than the C-130. The C-5s have been used in the Iraqi war and Afghanistan to move men, women, and materiel, equipment, from the United States into theaters. And the movement of those personnel and that equipment within theater has fallen largely to C-17s and to C-130s.

I wish I could stand here today and say the combination of ships we have in our sealift capability and aircraft as part of our air bridge is sufficient to meet our needs.

Our sealift capability is inadequate. Our airlift capability is in even worse shape.

I have an article—this is a June 2 edition of Air Force magazine—where they talk a good deal about the squeeze on air mobility—not just my words but the words of the top people in military airlift in the Air Force who cite examples of how our inability to move as much personnel, as much equipment as we sought made it difficult in some cases for us to implement our game plan in that part of the world. If the current assets, especially the current air assets we have within the Air Force, are insufficient to provide sufficient airlift, what might be sufficient?

Every so often, the Air Force is asked or directed to do another update to look at their assets and what we expect to be the need for airlift in the years to come and to tell us and the administration what their needs are. We need a new analysis and we need an update.

My hope is the language in the Defense bill, the authorization bill which is now in conference—that out of that conference will come clear direction for the Air Force, authorization for the Air Force to update that last study which is called MRS-05, out of that update will flow a good deal of the information we need.

We don't need another study or another analysis to tell us that the resources we have on the airlift side are woefully inadequate. The answer is more, not less. A critical question for us in this body, especially as we face a budget deficit this year of \$450 billion, is how do we go about meeting our woefully inadequate airlift capability, how do we do that in a way that is cost-effective and in a way that recognizes that we have these huge deficits and that as far as the eye

can see they continue. I want to talk about that.

I would like to talk for the next several minutes about a cost-effective airlift, and then later today Senator Biden and I, along with Senator Chambliss and others, will offer an amendment that we believe addresses in good faith how we might make some progress on that front today.

There are some who would like to take our C-5s, the fleet—there are 74 C-5As and 50 C-5Bs—some would like to get rid of all the C-5As, send them to the boneyard and let that be that. They have some interest in upgrading or modernizing the C-5Bs but less interest in doing anything for the C-5As.

As it turns out, we are going to be flying C-5As and C-5Bs for a good long while, probably for the remainder of this decade on both As and Bs and, for Bs, well beyond that; even programs for As well beyond this decade. There has been a lot of debate in this Chamber in the last couple years on how we might upgrade the capability of the C-5 to make it more mission capable.

The Air Force pays a lot of attention to a number called the mission capable rate for aircraft. The mission capable rate for the new C-17 is in the mid 80s—it does a really fine job—the mission capable rate over the last 12 months for the C-5As, about 60 percent; the mission capable rate for the C-5Bs over the last 12 months, 72 percent. Two upgrades have been proposed to both aircraft. One of those upgrades is fairly inexpensive, the second expensive.

The less expensive upgrade is the Avionics Modernization Program. The Avionics Modernization Program would enable us to take a 1970s cockpit of a C-5A or a 1980s cockpit of a C-5B and turn it into

a 21st century cockpit. Not only would it look different, the plane would fly differently, would be controlled differently. The communication gear would become 21st century communications equipment. Its reliability and effectiveness would be enhanced as would that of the crew—new training, avoidance equipment, the ability to actually fly at very accurate levels of altitude to enable us to get the maximum advantage out of the airspace in the skies in which we fly.

The avionics modernization package costs about \$3 million per aircraft. Between fiscal years 2002 and 2003, the Congress authorized and appropriated money to install the avionics modernization package in a total of 10 C-5 aircraft. This year, in the fiscal year 2004 authorization bill, there was an authorization for 30 additional kits, for the cockpits, communications systems, and all. In this bill, there is money appropriated for 18.

Let's go back. I talked about the number of C-5s we have: 74 C-5As, 50 C-5Bs. The Air Force is in the process of retiring 14 of the least dependable C-5As, the ones that are least mission capable, that create the most maintenance headaches. So we will end up with 60 C-5As and 50 C-5Bs later this year or next. The Air Force would like to see their C-5s AMPed, or fully equipped with this new upgrade, the avionics modernization package, by fiscal 2007. In order for us to meet that schedule, we need to appropriate not AMP kits for 18 C-5As in 2004 but for 30 to get us back on schedule. That 30, plus the original 10, will take us to 40 AMP kits for C-5s. That would leave about 70 more we would need to fund in 2005, 2006, and 2007.

What do we get out of AMPing the aircraft? Among the things that we get is

better mission capable numbers. Last week I was privileged to meet with the four star general who is the commanding officer of our airlift mobility command, and I asked him: In terms of mission capable improvement, what can we look for? For each avionics modernization program that we put in a C-5, how much improvement would we get?

He said it would be anywhere from 3 to 5 points of improvement of mission capability in each aircraft. That could mean taking the C-5 numbers, the A numbers, for the last year where the mission capable rate was 60 and bring it up to 63, or even as high as 65. It would take the 72 percent mission capable rate from the C-5Bs from the last 12 months and raise it to 75 percent, or maybe as high as 77 percent.

If you think about it, if we were to actually install the AMP kits in all C-5As and Bs, at roughly \$3 million apiece, the cost to the Treasury is about \$350 million. If you multiply 3 percentage points or 5 percentage points—let's take somewhere in between, say a 4-percent increase in the mission capability rate for AMPing C-5s. If you multiply that 4 percent across the whole 110 C-5As and Bs we have in our inventory at the end of this year, we end up with the equivalent of about—because of improvements in mission capability rates—4.4 additional C-5 aircraft.

The cost of getting those four additional C-5 aircraft is about \$350 million. The cost of a new C-5 or a new C-17 is a whole lot more than that. We can get four equivalent C-5s simply out of being more mission ready and mission capable by AMPing, installing the avionics modernization package in all the C-5s.

I want to talk a moment, if I could, about those who are interested in doing something about the As, not the Bs. I have talked about this first improvement, this first retrograde, the avionics modernization package.

The second piece is reengining, referred to as RERP. Reengining the C-5s would be a next step and a far more expensive step. We would not only change up the engines and install the same kind of engines that are on Air Force One, we would make major changes in the hydraulics and landing gear. Those are the major areas that cause downtime on the C-5s.

If you put together the improvements in mission readiness for AMPing the aircraft and another 3 to 5 percentage points, and from 10 to 15 percentage points by reengining the aircraft, you are talking about improvement in mission capability rates for the C-5As from roughly 60 percent to somewhere in the mid-70s, and improving the mission capable rate of the Bs from the low 70s to somewhere in the mid-80s.

There was a big debate a year or two ago on whether or not we ought to go forward and install both the first inexpensive fix, the avionics modernization package, and the reengining, just appropriate money to do both. The agreement that was struck was to do both fixes on a total of three aircraft. We are going to install the avionics modernization package on one C-5A and two C-5Bs. We are going to install the reengining package, new engines, hydraulics and landing gear and other changes, on one C-5A—the same A—and two C-5Bs. We are going to fly them for a while and see how they work. If they work as advertised, or if they continue to have a high failure rate—and I have a hunch they are going to work—we are not talking about developing

a new engine, we are talking about taking the same engine as on Air Force One, a modern aircraft engine, and it will give us 10,000 hours between changes of engines instead of 1,000, and it will make a huge difference in our mission capable rate.

Somewhere down the line we will have the opportunity to have those test aircraft—three of them—in the air, flying for a year or so; we will see how they are performing and we will then make the decision as to whether we want to invest more money in either of those retrofits.

I think that is smart. When we are talking about spending that kind of money, we ought to upgrade the planes and fly them for a while and see if they work as advertised.

The avionics modernization package has already been installed in at least one aircraft, and more are coming. The aircraft that it has been installed in was actually installed ahead of schedule and within budget. The early test is going well.

The Air Force has chosen a site on the east coast and one on the west coast to continue the work that has begun on the avionics modernization package installation for the C-5s.

We should go forward and put the C-5 avionics modernization package in as many C-5s as quickly as we can. Those are not my words. Those are the words of the four star general who actually heads up military airlift command. Those were his words as recently as last week. He said: Provide for us as many AMPed C-5s as you can, as quickly as you can.

The reason is that it is a fairly cheap fix to get aircraft readiness up and to give him

the aircraft tails, if you will, that he needs in order to support our troops in Afghanistan, Bosnia, Iraq, and other places around the world—probably Liberia next. Who knows.

Let me close with this thought. Sometimes we are asked to appropriate money on this floor and we are asked to appropriate money for defense projects and others that have not been authorized by the authorizing committee. These 12 additional AMP kits, avionics modernization packages, for the C-5s have been authorized in both the House authorization bill, the Defense bill, and the Senate authorization bill. The authorizing committees are on board.

Sometimes we are asked to appropriate money when a branch of our Armed Forces has not expressed interest in a particular kind of weapons system or project or gizmo. In this case, these 12 kits, on top of the original 18 in the bill, are in the Air Force's list of unfunded priorities.

Sometimes we are asked to appropriate money when neither the aircrews who fly these planes nor the maintenance folks who maintain them nor the four-star generals in charge of the whole show really think it makes a lot of sense. In this case, the aircrews who fly them, the maintenance crews who maintain them, and the four-star general who is in charge of the whole show say we need as many C-5s AMPed as quickly as we can.

Sometimes we are asked to appropriate dollars to buy a capability that is not needed. In this case, we need airlift. We need it. We need it today; we needed it last month; we needed it last year; and we are going to need more of it next year. We cannot meet the current demands for airlift.

If we actually put on all of our C-5s between now and 2007 the avionics modernization package, it is the equivalent of giving the Air Force three, four, or as many as five additional C-5 aircraft with which to meet their missions.

Sometimes we are asked to appropriate dollars for items that are not cost-effective. I am going to tell my colleagues, to get the effect of three or four or five additional C-5 aircraft for \$350 million by simply raising mission capability by anywhere from 3 to 5 points per aircraft for \$3 million apiece is a bargain in this world, and it is one we should not pass by.

If we end up with a mix of C-5As and C-5Bs—let's say in C-5Bs you have a cockpit that is 21st century—modern communications equipment, modern terrain avoidance, altitude separation equipment—and you end up with C-5As that have not been modernized or a 1970 cockpit with the old altitude separation equipment, the old terrain avoidance, the old communications gear—we put our crews in a difficult or maybe dangerous situation.

Today, C-5 aircrews move from C-5As to C-5Bs and fly them interchangeably. It does not matter because one aircraft is very similar to the other. The people who maintain the aircraft maintain the C-5As as easily as they can maintain a C-5B. Most of the spare parts fit interchangeably with the C-5Bs. I would not want to say to a crew today: You are going to fly the C-5B with the new avionics modernization, you are going to get in a 21st century cockpit and fly this aircraft, and then say to the same crew: Tomorrow you are going to fly the old aircraft with the old cockpit, with the old equipment.

I would not want to say to the maintenance crews: We expect you to maintain this old aircraft, and a lot of them are located at the same bases. Do we expect them to maintain the same aircraft—it is a differently configured aircraft in the cockpit—and expect them to have the expertise and training to do maintenance on an entirely different cockpit?

Finally, in terms of keeping spare parts, we do not put the spare parts at Air Force bases that have C-5As. There are Air Force bases around the world and in places where we support troops and have airlift.

I would not be making a big deal about this if the wings on the C-5As or C-5Bs were about to deteriorate and fall off. They are not. The wings and fuselages of the C-5As and C-5Bs, according to the experts, have another 30 or 40 useful years of life on them.