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REFERENCE: Vol. 132 No. 74; Continuation of Senate Proceedings of June 5, 1986, Issue No. 74; and Proceedings of June 6, 1986, Issue No. 75.

TITLE: URGENT SUPPLEMENTAL APPROPRIATIONS ACT, 1986 (Continued)

SPEAKER: Mr. ABDNOR; MR. BAUCUS; Mr. BENTSEN; Mr. BINGAMAN; Mr. BOREN; Mr. BUMPERS; MR. BURDICK; Mr. BYRD; Mr. CHAFEE; Mr. COHEN; Mr. CRANSTON; Mr. D'AMATO; Mr. **DANFORTH**; Mr. DeCONCINI; Mr. DOLE; Mr. DOMENICI; MR. DURENBERGER; Mr. EAGLETON; MR. GARN; Mr. GLENN; Mr. GOLDWATER; Mr. GORTON; Mr. GRAMM; MR. GRASSLEY; Mr. HARKIN; Mr. HART; Mr. HATFIELD; Mr. HEINZ; Mr. HOLLINGS; Mr. JOHNSTON; Mr. KASTEN; Mr. LEVIN; Mr. LONG; MR. MCCLURE; Mr. MELCHER; Mr. METZENBAUM; Mr. NICKLES; Mr. NUNN; MR. PACKWOOD; Mr. PROXIMIRE; Mr. PROXMIRE; MR. RIEGLE; Mr. SASSER; Mr. SIMPSON; MR. STAFFORD; Mr. STENNIS; Mr. STEVENS; Mr. THURMOND; Mr. WEICKER

Mr. **DANFORTH**. Mr. President, I ask unanimous consent that the committee amendment be laid aside for the purpose of taking up another amendment.

The PRESIDING OFFICER. Without objection, it is so ordered.

The Senator from Missouri.

AMENDMENT NO. 2021

(Purpose: To strike out language directing the allocation of research and development funds to certain educational institutions)

Mr. **DANFORTH**. Mr. President, I send an amendment to the desk and ask that it be reported.

The PRESIDING OFFICER. The clerk will report the amendment.

The legislative clerk read as follows:

The Senator from Missouri [Mr. **Danforth**] for himself, Mr. Bingaman, Mr. Proxmire,

Mr. Quayle, Mr. Armstrong, Mr. Bentsen, Mr. Bradley, Mr. Dixon, Mr. Eagleton, Mr. Evans, Mr. Goldwater, Mr. Levin, Mr. Lugar, Mr. Wilson, Mr. Lautenberg, Mr. Melcher, Mr. Roth, Mr. Nunn, Mr. Pryor, Mr. Glenn, Mr. Sasser, and Mr. Wallop proposes an amendment numbered 2021.

Mr. **DANFORTH**. Mr. President, I ask unanimous consent that the reading of the amendment be dispensed with.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment is as follows:

On page 25, strike out lines 1 through 7 and lines 12 through 15.

On pages 25 and 26, renumber sections 4, 6, 7, and 8 as sections 3, 4, 5, and 6, respectively.

Mr. **DANFORTH**. Mr. President, may we have order in the Senate?

The PRESIDING OFFICER. The Senate will be in order so that we may hear the Senator from Missouri.

The Senator from Missouri.

Mr. **DANFORTH**. Mr. President, this amendment is offered by 22 cosponsors. They are in addition to myself, Senators Bingaman, Quayle, Proxmire, Armstrong, Bentsen, Bradley, Dixon, Eagleton, Evans, Glenn, Goldwater, Lautenberg, Levin, Lugar, Melcher, Nunn, Pryor, Roth, Sasser, Wallop, and Wilson.

It is particularly interesting that this list of 22 cosponsors includes the chairman of the Armed Services Committee and the ranking member of the Armed Services Committee.

The issue raised by the amendment is whether the Appropriations Committee should earmark research money to certain specified universities.

The bill before us earmarks \$80.6 million in research spending to 10 universities.

The issue before us is not whether that \$80.6 million should be spent for research. I do not know whether it should be or not.

That kind of question is within the expertise of the Armed Services Committee and the Appropriations Committee, not the Senator from Missouri.

I assume that substantial amounts of money must be spent for research for armed services, but that is not the issue before us.

The issue before the Senate right now is whether research money to be spent for university research should be earmarked by the Appropriations Committee or, rather, whether that money should be spent according to a competition process whereby scientists, either within governmental agencies, in this case the Department of Defense, or scientists who are in some sort of review committee make that decision on the basis of merit.

The issue really is one of merit and competition for the spending of research dollars or instead whether research dollars should be spent by the Appropriations Committee frankly on the basis of political logrolling. It is important to realize that of these 10 universities, three of the projects that are represented in these earmarked appropriations, three of the projects were never submitted to the Department of Defense. There were never any proposals for 3 of the 10 projects.

In the case of four projects, the Department of Defense, after analyzing the proposals, found that the universities in question were without the research capabilities to justify fundings at the levels specified in this emergency appropriation. And in the case of four of the projects, some of these are overlapping I might say, but in the case of four of the projects, they were for construction for general purpose research buildings. The Department of Defense has a policy, Mr. President, against spending such research money for general purpose construction.

This process of earmarking research money in appropriations bills is strongly opposed both by the administration and by the academic and scientific community.

Mr. President, I ask unanimous consent that letters from Mr. John McTague, acting science adviser to the President, dated May 23, 1986, to myself, and by Secretary Weinberger to Senator Dole, dated May 7, 1986 be printed in the Record at this point.

There being no objection, the letters were ordered to be printed in the Record, as follows:

The White House,
Washington, May 23, 1986.

Hon. John C. **Danforth**,
U.S. Senate, Washington, DC.

Dear Senator **Danforth**: I strongly support the effort you and your colleagues are making to preserve the quality of Federally supported research, which is an essential underpinning of our national security, economic competitiveness, and the quality of life of all our citizens. The reason our research enterprise is the envy of the world is that careful review by experts ensures that support goes to our very best scientists and engineers.

As technological competition becomes ever more international and ever more intense, we must ensure that each research dollar we spend is used even more efficiently. Set-asides

from carefully crafted research programs to address other goals, however desirable, hobble use in this competition and create a climate of cynicism among our best scientists and engineers.

I urge you and all your fellow Senators and Congressmen to support our system of expert review by eliminating all Congressional set-asides for specific research conduct and facilities from the budgets of Department Defense, Department of Energy, and other agencies.

Sincerely,
John P. McTague,

ACTING SCIENCE ADVISOR TO THE PRESIDENT.

The Secretary of Defense,
Washington, DC, May 7, 1986.

Hon. Robert Dole,
Majority Leader, U.S. Senate, Washington, DC.

Dear Bob: Thank you for your letter of February 19, 1986, regarding R&D support earmarked for ten universities in the Conference Report accompanying the Defense Department Appropriations Act, 1986 (Joint Resolution, Public Law 99-190).

As you are aware, university research provides the Department with science and technology critical to the development of future defense systems. In addition, universities are the source of scientists, engineers, and expert advice essential to our nation's future.

The Department funds research, including that conducted at colleges and universities, that is in support of our defense mission. Except when otherwise authorized by statute, individual projects are competitively selected for funding after taking account of all relevant considerations with particular emphasis on the research needs of the Department and the technical merit of the research proposed. The competitive process, which has been supported by Congress, has contributed to the preeminence that our nation's universities enjoy. The Conferees' earmarking of research funds for specific universities, without merit competition, establishes a precedent that could jeopardize this preeminence.

We will continue to work with you and look forward to your support for a strong university base for our research needs.

Sincerely,
Cap.

Mr. **DANFORTH**. Mr. President, in addition to the White House and the Defense Department, the earmarking of funds for research is opposed by the Association of American Universities and the National Association of State Universities and Land Grant Colleges. I ask unanimous consent that a letter dated May 13, 1986 -- this letter was written to Senator Harkin by the presidents of those two organizations -- be printed in the Record.

There being no objection, the letter was ordered to be printed in the Record, as follows:
May 13, 1986.

Hon. Thomas A. Harkin,
Hart Senate Office Building, Washington, DC.

Dear Senator Harkin: When the Senate Committee on Appropriations meets later this week to consider H.R. 4515, the Urgent Supplemental Appropriations for FY 1986, we urge you to reject the earmarks totaling \$24.6 million for Northeastern University and the Rochester Institute of Technology in the Department of Defense appropriations proposed by the House, and to resist adding any other similar projects. Neither of these two projects is requested by the Department; neither has been reviewed on its scientific and technical merits in competition with meritorious proposals from other institutions. We also urge you to reject any attempts to add the remaining eight earmarked projects for academic institutions that were recommended in House Report 99-450 accompanying House Joint Resolution 465, the Continuing Resolution for FY 1986 (P.L. 99-190).

If any of these ten projects, or others that may be proposed, is funded, pressures on other institutions to seek direct funding for research and research facilities projects will grow, and increasing numbers of capable and deserving institutions will begin to seek direct funding for projects. They will do so because across the country unprecedented research and training opportunities are being severely hampered by inadequate facilities. It is precisely because national research opportunities and national resource needs both are great that Federal funds for research and research facilities must be awarded competitively based on considerations of scientific and technical merit. If the present merit-based system of resource allocation is allowed to be eroded by the actions of a few, we fear that the willingness and the ability of the Department, and other agencies, to strengthen investments in university research and facilities programs will be compromised.

We ask you, therefore, to reaffirm the principles of merit-based allocation of funds for university programs by rejecting all earmarked funds for university research and research facilities construction projects from H.R. 4515.

Sincerely,
Robert M. Rosenzweig,
PRESIDENT,
Association of American Universities.
Robert L. Clodius,

PRESIDENT, NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND GRANT COLLEGES.

Mr. **DANFORTH.** Mr. President, at the same time, I will send to the desk and ask unanimous consent that various letters and position statements by the National Academy of Sciences, the American Physical Society, and the American Association for the Advancement of Science be printed in the Record.

There being no objection, the material was ordered to be printed in the Record, as follows:

National Academy of Sciences,
Washington, DC, May 27, 1986.

Hon. John C. **Danforth,**
U.S. Senate, Washington, DC.

Dear Senator **Danforth:** It is my understanding that the Urgent Supplemental Appropriations Bill for FY 1986 will come before the Senate after the Memorial Day recess. I appreciate the opportunity to provide you with my views, and those of the Academy Council, in opposing provisions of that measure providing grants to educational institutions for major academic research projects which have not been subjected to an appropriate merit review.

Unquestionably, these actions sponsored by individual Congressmen reflect the pressure arising from widespread need to modernize deteriorating and obsolete research facilities at universities and colleges throughout the nation. Estimates on the extent of that unmet national need for new construction and renovation varies in the range of \$5 to \$20 billion over the next 10 to 20 years. As you know, the Federal government now has virtually no program for funding research facilities; thus, programs to provide support for academic facilities that are judged to be scientifically excellent should receive favorable Congressional consideration. However, efforts by a few academic institutions and their representatives in Congress to bypass merit review in order to meet their individual needs harbor the potential for enormous damage to the nation's research enterprise. Approval of such earmarking creates incentives for other institutions to seek similar treatment from the Congress.

The Council of the National Academy of Sciences has been concerned for some time about the adverse effects of such earmarking, as reflected in the attached statement adopted in October 1983. This statement has even greater relevance in today's budget climate.

The excellence of our national research has been sustained by a system for assuring optimal use of public funds: a competitive review evaluation process to assure that projects and facilities selected for funding are those which most merit support in terms of the overall health of scientific research. The supplemental appropriations bill now before

the Senate ignores that history of success, by providing \$80.6 million in the 1986 defense budget for university research projects without their having been subjected to such an appropriate merit-based review.

We are better served as a nation if we continue to maintain a climate in which our research institutions can expect that only requests for facilities which are judged to be scientifically excellent will be funded. Thus, I respectfully urge that these earmarked projects not be included in the Urgent Supplemental Appropriations Act for fiscal year 1986 and that their consideration be delayed pending a competent, competitive merit-based review.

Yours sincerely,
Frank Press,
President.

STATEMENT OF THE COUNCIL; FEDERAL FUNDING FOR RESEARCH FACILITIES AND INSTRUMENTATION

In recent months, there have been a few instances in which federal funding decisions for major university scientific facilities have not been subject to an appropriate review process. Informed peer judgments on the scientific merits of specific proposals, in open competition, should be a central element in the awarding of all federal funds for science.

In the past, such objective systems of evaluation have met the needs of our country well, and have contributed to the scientific preeminence of the United States. In the long term, they also help to maintain the pluralism that is important to the productivity of American science and is characteristic of political decision making.

We urge that the academic community and public officials exercise vigilance to protect this informed evaluation and decision-making process in the awarding of funds, not only for the support of scientific research proposals, but also for major scientific facilities and instrumentation.

The American Physical Society,
New York, NY, May 30, 1986.

Hon. John C. **Danforth**,
U.S. Senate, Russell Senate Office Building, Washington, DC.

Dear Senator **Danforth**: I write to commend you for your leadership in attempting to remove "pork barrel science" from the Department of Defense Urgent Supplemental Appropriation.

We have watched in dismay over the past several years as the merit review process that has kept the United States at the forefront of world science since World War II has been increasingly circumvented. The dangers are obvious. Each time an institution successfully by-passes the normal process of proposal submission and review, more institutions are persuaded that political maneuvering has replaced merit as a means of securing support for research and facilities. It is a practice that must be brought to a stop.

The American Physical Society, through its elected Council, more than a year ago adopted a strong statement opposing "pork barrel science" projects, a copy of which is enclosed. In the seventeen months since that statement was adopted, the situation has worsened with specific research projects as well as facilities receiving funding through direct Congressional action without review by impartial scientific experts. As the statement of the APS Council makes clear, we recognize that Congress is responsible for considering a variety of factors in addition to scientific merit in allocating funds. But in these times of fiscal stringency, it is reckless to commit research funds without impartial scientific review.

Your courage in leading the effort to stop this dangerous practice is applauded by everyone who believes that the health of American science is vital to our security.

Sincerely,
Sidney D. Drell.

Enclosure.

STATEMENT OF THE APS COUNCIL: SCIENTIFIC REVIEW OF RESEARCH FACILITIES FUNDING

We deplore the inclusion in the federal budget of major scientific projects that have not been subjected to the normal process of proposal submission and expert review. The consequences go beyond the diversion of scarce resources from projects of higher priority. Institutions are increasingly persuaded that political maneuvering is more important than scientific justification in securing federal funds. Yet each year many worthy scientific projects must be abandoned or deferred for lack of funds. The developing pattern of funding major projects without subjecting them to impartial expert scrutiny diminishes sciences.

Quite clearly Congress is responsible for considering a variety of factors -- such as geographic balance, economic need, and affirmative action -- in allocating funds for major projects of any sort. We urge, however, that review by impartial scientific experts be an important consideration in any allocation of funds for research facilities.

American Association for the Advancement of Science,
Washington, DC, May 23, 1986.

Hon. John C. **Danforth**,
U.S. Senate, Russell Senate Office Building, Washington, D.C.

Dear Senator **Danforth**: As chief executive officer of the American Association for the Advancement of Science (AAAS), I am writing to express my concern about the FY 1986 Supplemental Appropriations Bill approved recently by the Committee on Appropriations and scheduled for floor action shortly.

As described in the Washington Post May 16th, this bill contains more than \$80 million designated for defense-related research and construction projects at various universities. None of these projects have apparently been subjected to the competitive peer review process through which such allocations are generally made.

The AAAS Board of Directors and Council, along with the National Science Board, the National Academy of Sciences, and many of the other major scientific, engineering and higher education associations in the United States, have taken strong stands against such funding practices on a number of occasions during the past three years. Copies of AAAS position statements are attached.

The AAAS remains strongly opposed to these practices and respectfully urges that the provisions earmarking funds for specific institutions be deleted during floor action, and that merit-based review be employed for award of such funds in the future.

Sincerely,
William D. Carey,
Executive Office.

Mr. **DANFORTH**. Mr. President, regardless of how the budget resolution turns out, it is clear that all of us in the Senate, all of us, whether we are hawks or doves, are committed to very substantial spending for national defense. But it is also clear that very few of us, if any, believe that we can issue blank checks on defense spending. If we are to spend money on national defense at a time of budgetary constraint, it is important that that money be spent wisely and not foolishly.

It is important to spend on muscle, not fat. Sometimes we say, "Where is the fat? Where is the fat in defense spending?" Here it is, Mr. President. Here it is in this bill. When research money is designated for universities on the basis of political influence, when it is designated on the basis of who has pull, when it is designated on the basis of lobbying instead of merit and instead of competition, that is wasteful spending of limited defense resources.

We in the United States probably are never going to have the kind of military weight, the

sheer weight of numbers that the Soviet Union has. We probably never will have the number of tanks or the amount of artillery or the number of men in arms. What gives us the edge, Mr. President, what provides an advantage to the United States is our technological know-how, our R&D, our science.

It is for that reason that we assure ourselves that research money be spent in the very best and wisest manner. And that is the issue that is before us right now -- whether it is going to be spent on the basis of competition or whether it is going to be spent on the basis of politics.

For those throughout the country who question defense spending and who feel that we are spending too much, I think that when we porkbarrel defense money, defense spending, it gives the whole defense budget a bad name. I would guess that that is one of the reasons why Senator Goldwater and Senator Nunn have joined on as cosponsors of this amendment.

Mr. President, this is not something new. I saw that Senator Stevens sent out a Dear Colleague letter to Members of the Senate expressing his views and stating that this is nothing new, to earmark some money for specific universities in an appropriation bill. And that is exactly the point. It is not something new.

This is not something that is unique in this particular appropriations bill. This has become a trend that extends beyond defense spending.

In 1982, Congress earmarked a total of \$3 million for specific universities for spending for scientific purposes. That amount of money has escalated steadily between 1982 and 1985, which is the last figures I have, from \$3 million to \$137.6 million. It has become something of a trend for university presidents, at least some of them, to come to Congress and to ask us for specific money for research. And the Senator from Alaska has sent us a listing -- and he claims that it is a brief listing -- of some of the colleges and universities receiving earmarked appropriations in the 98th Congress. It is a single-spaced list and it goes on for slightly more than two pages.

It is true that it is a trend that we have undertaken, and I think it is wrong. I think that this is the time in this particular appropriations bill to make that point, not simply for the projects, the 10 projects that are specifically earmarked in this bill, but for the whole tendency that we are involved in.

It has turned our colleges and universities into lobbyists. Prof. Mildred Dresselhaus of MIT has made the point that earmarking sends the message to our research institutions in the United States that political maneuvering is more important than scientific justification in securing Federal funds. Researchers have become lobbyists. Hopefully, if we have passed the tax bill, we will have given our lobbyists a little less to do in the Finance Committee and maybe the lobbyists who choose to do that will simply be representing colleges and universities before the Appropriations Committee.

The PRESIDING OFFICER. Will the Senator suspend? The Senate is not in order.

The Senator from Missouri.

Mr. **DANFORTH**. One final point, Mr. President, and then I will yield the floor. In the committee report that is attached to this bill, the final paragraph appears:

The committee does not intend to consider or approve any future requests for specific universities or research institutions for projects that are noncompetitive and do not comply with legal requirements for merit reviews and competitive contracting, nor is it the committee's intention to consider or approve future requests to fund construction of related facilities for such projects. The committee will not consider any future requests to earmark DOD research and development funds for specific research projects that have not gone through competitive and merit review processes without specific authorization.

Well, a couple of comments should be made about this statement in the committee report.

The first comment is we have heard this before. We heard it back in 1984 when Congress enacted the Deficit Reduction Act of 1984, and within that act something that we called the Competition in Contracting Act.

In that act, we specifically said, back in 1984, Congress enacted a statute which specifically said that the competitive selection for award in basic research proposals resulting from the general solicitation and peer review or scientific review as appropriate in such proposals constitute the kind of competitive procedure that we said we wanted back in 1984.

We have taken that position as a matter of ritual. Now the question is whether we take that position as a matter of fact.

Mr. President, I believe that what is involved here today is very important, extending far beyond this appropriation bill, going to our basic research in this country, to our academic community, to the relationship between Congress and our academic community. The question is whether merit counts or whether it is just pure politics.

I ask unanimous consent that Senators Durenberger and Boschwitz be added as cosponsors, and Senator Gramm as well.

The PRESIDING OFFICER. Without objection, it is so ordered.

The Senator from Alaska.

Mr. **STEVENS**. Mr. President, I did send a letter out to Members of the Senate listing just for the 98th and 99th Congress a portion of the list of universities and colleges which have received specific appropriations without peer review.

This is the first time that the defense appropriations bill has included such a list. I think we should explain to the Senate that we had attempted to provide moneys both for the competitive research portion. I hope the Senator who is offering the amendment will be fair with this. We added in the Senate committee \$100 million for the university research initiative, which is the peer review process. In conference, that was reduced to \$75 million.

We also added the funds for the nonpeer review universities. Our objective was to increase the percentage of funds for research that is done at the university level.

We now have over 70 percent of this research done in industry, 22.8 percent is done Government in-house, and 2.2 percent under Federal contract. The universities of the country do 3.7 percent.

They only do 3.7 percent this year because of our initiative. We added, as I said, \$100 million for the peer review process; we added some \$80 million for the nonpeer review process.

That has maintained, by virtue of that balanced action, a level of 3.7 percent of all the money spent for research by the universities.

There were Senators, and I hope they would come here, who argued that we cannot put the full review in the peer review process because peer review favors a few universities. The peer review universities are selected from those outstanding in certain research and they are inclined to give money to the same institutions.

We had a selection process that tried to recognize the need particularly in the computer area. Most of our money in the nonpeer review goes to computer concepts of research. This is basic research and this is our one real need in our country, to forge ahead in our area of real lead technology, computers, and the use of computers related to defense.

I do not question the Senator's motives in saying do not approve this money. But I say to the Senate if you do not, you are going to deny the money for university research. You may not like the way we did it, and there has been objections.

We indicated, incidentally, if the Senator reads what we have said, that we will not use the appropriations bill to provide money for the universities on a nonpeer basis. We will only do it if it is authorized by law.

In other words, I say to my friends on the authorization committee, they have asked for additional responsibility, and we have said to the university lobbyists, "Go to the authorization committee next time and get your nonpeer review authorization and if you do we will fund it."

We have not said we will not provide money for universities on a nonpeer review basis. We have said to get it authorized.

I think that is fair because, basically, the initiative that we tried to fund was, in fact, started by the authorization committee. It is a good initiative. As I said, it is the DOD-university initiative concept. Had the conference listened to our subcommittee there would have been \$100 million put in that. It ends up at \$75 million for the peer review universities; \$80 million for the nonpeer review universities.

I hope you will read that list, those Members who have not yet endorsed this amendment. I would hope that you would not agree to this amendment.

I happen to believe that the universities are the source, really, of our future greats in this area, and we should move as much money as we can into that area.

Because I did participate in this move, I called your attention to the fact that there is no money for any university in Alaska in this list because I did not want to be accused of trying to bring home some bacon in connection with this. I have never put money into a university in Alaska in this kind of research because of that problem. Some of my university friends in Alaska do not quite like that, but I think they are qualified to get their money in peer review, Mr. President, and they have in the past gotten their money in the area of peer review in the area where we excel.

At least 24 States got money last year through the nonpeer review process. Twenty States got money through the nonpeer review process without regard to this bill this year.

If we are going to be fair and establish a new rule for the future, I am willing to do that. I would hope the Senate understands the fairness of this, though.

Just in case you have not read the list, let me read the list to you for the 98th Congress, and these are colleges not from the Defense Subcommittee. In other bills, these colleges and universities have been given nonpeer review moneys.

Baylor, Boston College, Boston University, California South University, Catholic University, the College of American Samoa, the College of Micronesia, Columbia University, Florida State University, Gallaudet, Hampshire College, Iowa University, Iowa State, Massachusetts Institute of Technology, Mississippi State, New York University, North Dakota State, Oregon Health Sciences, Oregon State, Pennsylvania State, Purdue University, St. Paul Vocational Technical Institute, Seattle Community Central College, State University of New York, Texas Tech, Tufts, University of California at Davis, University of California at Los Angeles, University of Connecticut, University of the District of Columbia, University of Hawaii, University of Missouri, University of New Hampshire, University of New York, University of Oregon, University of Rochester, and West Virginia University.

Mr. President, none of that money came from the bill I managed. None of that money came from the Defense Subcommittee. Yet it is money that went to those colleges. The complaint that is being made on the floor tonight is do not use defense research money

for nonpeer-review colleges. These lists were prepared, by the way, by the Congressional Research Service. That nondefense research money has liberally been spread around on a nonpeer-review basis in the colleges and universities of the country without complaint on the floor of the Senate, to my knowledge. Now we are hearing complaints about defense money being given on a nonpeer-review basis. Now we hear that these colleges got it on a nonpeer-review basis from other bills.

My point is if we are to be fair, we will set a new policy for the future. These moneys were agreed to last year. They were agreed to in the conference report with the House on the basis of Members who were brought into the various conference committees who said they wanted to participate in this kind of defense research. I happen to believe it is very important to those of us who support the defense concepts and have the duty to try to maintain the defenses of this country to have university and college support -- not just the limited few, Mr. President. I hope those who came and urged us to have a balanced approach between peer review and nonpeer review will stand up and support this.

In any event, those of you who have already gotten money in other processes on a nonpeer-review basis, I ask you in fairness why should we not use a nonpeer-review basis for defense research money?

In closing, let me point out that the Secretary of Defense did oppose the use of this money on a nonpeer-review basis, but he said this in his statement:

... should the Congress retain these funds, then consideration should be given to including all 10 universities for which funds were so proposed during the congressional markup of the fiscal year 1986 budget.

The total value at that time was \$66 million when we were marking that up.

I do believe that we have a balanced program. We have agreed we will rely upon the authorization process from now on and we have committed and I think the chairman of our committee has agreed to that concept, that we will not initiate nonpeer-review moneys that are not authorized, but we will fund to the extent we can those nonpeer-review universities that are in fact authorized by the authorization committee to receive moneys from the defense account to continue vital research for this country.

Mr. BINGAMAN addressed the Chair.

The PRESIDING OFFICER. The Senator from New Mexico.

Mr. BINGAMAN. Mr. President, I commend the Senator from Missouri for this amendment, I am one of 21 cosponsors. I know the hour is late.

I support the **Danforth** amendment to strike Appropriations Committee language which earmarks \$80.6 million in DOD research funds for 10 university projects. I am pleased to be among the cosponsors to this amendment.

Mr. President, I believe that the Appropriations Committee's proposal to earmark \$80.6 million is bad public policy. We should not bypass the traditional competitive merit-based procedures which DOD uses to allocate its research funds to universities.

Today this Nation faces challenges on many fronts, challenges which require a vibrant university research base. As President Truman noted in September 1945 at the end of World War II:

No one nation can maintain a position of leadership in the world today unless it develops to the full its scientific and technological resources. No government adequately meets its responsibilities unless it generously and intelligently supports and encourages the work of science in university, industry, and its own laboratories.

Those words are as true today as they were in 1945.

Since World War II we have in this Nation built a university research establishment which is the envy of the rest of the world. Its contributions to science and technology are unmatched. It is a triumph of our public policy that we have made excellence the primary criterion for allocating funds to university research projects. To a remarkable degree, the Congress has exercised self-restraint and allowed decisions about research funding to be driven by quality, as judged by qualified professionals, rather than by constituency interest. The proof of that policy is in its success in this tremendous research enterprise that we have today in our universities, and it is a success in which the Congress can take real pride.

But we stand today in serious danger of giving all of that away. If decisions about who shall do research and where it shall be done are made by the Congress with almost complete indifference to the relative quality of the research work, we will be well on the road to mediocrity, at best, in our research enterprise. We are being asked by the Appropriations Committee to fund ten universities at a total level of \$80,600,000. Those 10 universities in 1948 received a total of \$15,459,000 from the Defense Department to carry out research efforts. I ask unanimous consent that a table listing the actual 1984 Defense Department funding for these universities and the funding proposed in the supplemental be printed in the Record at this point.

There being no objection, the table was ordered to be printed in the Record, as follows:

DOD FUNDING FOR UNIVERSITY RESEARCH CENTERS

[In thousands of dollars]

University	1984 actual	Proposed in 1986 supplemental
Iowa State	\$146	\$6,500
Nevada, Las Vegas		3,500
Wichita State		5,000

University of Kansas	877	2,000
Northeastern	2,200	13,500
Oregon Graduate Center	7,591	1,000
Oklahoma State	2,877	1,000
Syracuse	405	12,000
Rochester Institue of Technology	310	11,100
Arizona State	1,053	25,000
Total (10 projects)	15,459	80,600
Total (excluding Oregon and Oklahoma State)	4,991	78,600

Mr, BINGAMAN. In 8 of the 10 cases, Mr. President, the set-aside proposed for the university is much larger than the amount that the university would otherwise receive from the Defense Department. In two cases, the Oregon Graduate Center and Oklahoma State University, the normal funds received from the Defense Department to carry on research work are much larger than the proposed set-aside. Those two universities do not need this provision to get the funds they need to carry on their research efforts. But the other eight clearly do. They are asking for over 15 times as much money as they actually received from the Defense Department in 1984. If the Secretary of **Defense** is forced to fund those projects, then that means almost \$80 million will not be available for other more meritorious projects which better meet the Defense Department's long-term needs.

The Secretary of **Defense** has made it very clear that he does not support the log-rolling approach dividing up DOD research funds. In a letter that he sent to seven Senators on May 7, the Secretary stated that "the earmarking of research funds for specific universities, without merit competition, establishes a precedent that could jeopardize the preeminence" of our Nation's universities. He urged that he be allowed to use a competitive process to select projects to be funded, a competitive process which accounts for "all relevant considerations with particular emphasis on the research needs of the Department and the technical merit of the research proposed." We should allow the Secretary of Defense to choose the projects that his professional staff believes best meet his Department's needs.

Mr. President, our universities today are facing growing requirements for equipment and facility modernization. Last week, a White House Science Council Panel on the health of U.S. colleges and universities, chaired by David Packard, released a report which called for a substantial increase in support for university facilities and equipment. The report highlighted the role that university-based research plays not only for our national security, but also for our international economic competitiveness and our health and welfare. The report urged that we restore a better balance between university-based basic research and more near-term oriented research projects.

The report placed particular emphasis on the problem of restoring our university

infrastructure. The panel recommended the establishment of a facilities fund within the National Science Foundation for the next 10 years. But the Packard Panel emphasized the need to maintain excellence in the allocation of these facilities funds. Let me quote from the report:

In order to encourage excellence, we recommend that awards from this fund should be made only on a 50-50 matching basis with non-Federal funding and that all proposals submitted to the fund be subjected to peer review within the scientific or technological community involved.

The report recommends that \$500 million a year be placed in this facilities fund by the Federal Government.

Obviously, taking up the recommendations of the Packard Panel is going to be very difficult in these times of fiscal stringency. But whatever the level of funds we allow to university research, we need to heed their prescription for the allocation of those funds. The Packard Panel is pointing to the right way to maintain excellence in our universities. The Urgent Supplemental is pointing the way to mediocrity, at best. A log-rolling approach cannot solve our university infrastructure problem.

Mr. President, today, I believe that we face a crossroads. Over the past few years, we have at an accelerating pace been moving toward a log-rolling or pork-barrel approach in the allocation of research funds. I believe that this practice has already damaged the conduct of scientific research, and will ultimately damage the overall scientific and technical capabilities of the Nation. It should be stopped.

In summary, let me tell the bad results which I see coming from the pork-barrel process for awarding Federal funds to universities. First, scarce resources are diverted from higher priority university projects. Second, colleges are encouraged to become more involved in political strategies for obtaining funds than in developing the most competitive new scientific proposals. Scientists who have developed truly meritorious new proposals quickly learn that they have been politically outmaneuvered, and must divert their energies to political gamesmanship to obtain needed funds. We are risking the prospect that our scientists and engineers will become increasingly cynical and disillusioned with the log-rolling process which does not consider academic excellence and merit as its principal criteria in the allocation of funds.

We have heard an almost unanimous voice from the scientific community in opposition to the log-rolling approach. We have heard from the National Academy of Sciences, the American Physical Society, the National Association of State Universities and Land Grant Colleges, the Association of American Universities, the American Association for the Advancement of Science and numerous individual university presidents. We have also heard from the Defense Department and other executive agencies in opposition to this approach.

Even the Appropriations Committee appears to have heard these voices of opposition to

the approach it is taking on these 10 university projects. In its report on the supplemental appropriations bill before us today, the committee states that:

It does not intend to consider or approve any future requests for specific universities or research institutions for projects that are noncompetitive and do not comply with legal requirements for merit reviews and competitive contracting. Nor is it the committee's intention to consider or approve future requests to fund construction of related facilities for such projects. The committee will not consider any future requests to earmark DoD research and development funds for specific research projects that have not gone through competitive, merit review processes without specific authorization.

But unfortunately, you turn the next page in the committee's report and there you find the committee recommending \$25 million for a Science and Engineering Center at Arizona State University, again without this project being subjected to competitive, merit-based contracting procedures. So it looks to me like the committee is admitting that it is using a flawed process in the allocation of these research funds and saying that it will not do it again, except for the nine previous projects and the one new project at Arizona State. But if this is the wrong process to use in the future, why is it not the wrong process to use today?

Mr. President, to conclude, I urge my colleagues to side today with allowing the Secretary of Defense to utilize competitive, merit-based procedures for the allocation of DOD university research funds. That is the prescription for excellence in our research enterprise. It is a zero-sum game that we are playing here today. In earmarking disproportionate funding for these universities, funding well above what 8 of the 10 institutions involved in the set-asides have historically received from the Defense Department, we will be taking funds from other institutions which would have received them as the result of competitive, merit-based processes.

Let us stop the logrolling in this area before it goes too far. I believe \$80.6 million is too far by any reasonable standard. Let us not abandon today the policies and practices that we have used in the 40 years since the end of World War II to build and sustain a capacity for basic research in our universities that for its size and quality is the envy of the world.

There are a couple of points I wish to make. The first point I want to make is that the issue before us is not whether this \$86.6 million is to be available for research in universities. The issue is whether we are going to allow the Secretary of Defense to use competitive merit-based procedures to allocate this DOD university research money. I think, clearly, the money should be used for research, but I am persuaded that the best use of the money is under a merit-based system of choice.

Mr. President, I believe those words I quoted earlier are as true today as they were when President Truman spoke them. I believe if we continue with the kind of pork-barrel allocation research funds represented in the bill as it now stands, we will be well on the road to mediocrity in our research enterprise.

I yield the floor, Mr. President.

Mr. SASSER. Mr. President, I am pleased to cosponsor this amendment offered by the distinguished Senator from Missouri and a multitude of other of my colleagues. I think the amendment that we are considering this evening will put an end to a really unfortunate precedent that would be set by this bill if it were allowed to pass unamended. What we are witnessing, I think, is the effort by some universities in some States to gain financial advantage at the expense of universities in other States.

When most of us think about pork barrel, we think of dam projects and highways. But university pork is just as much pork as public works is pork in some instances.

I am not saying that perhaps some of these projects are not worthy. Perhaps some of them are; perhaps all of them are. But if they are, let us allow them to be subjected to the same peer review as projects from other States.

I suspect, as a member of the Appropriations Committee and of the Defense Subcommittee of that committee, that I could be successful in securing funding for university defense projects in Tennessee just as some of our colleagues have done for universities in their States.

But I chose not to. And the universities in my State concur and support that judgment. They support the peer-review process because they think it is good public policy, it is good educational policy, it is good scientific research policy.

Frankly, when I heard about the effort being made by some of my colleagues to secure university defense research for universities in their States by going around the regular peer-review process, I took it upon myself to call the universities in Tennessee and I asked them if there were projects they wanted funded in similar ways.

But every university I discussed this with in my State said absolutely not.

Now, some of these universities are in competition in the defense university research program. But instead of seeking political advantage through their elected representatives they told me they preferred that their projects to be judged on their merits.

Now, Mr. President, this really goes to the heart of this issue.

Are we going to judge these projects on their merits, using a peer-review process, or are we going to judge them politically? Are they going to be awarded on the basis of which Senators sit on the Appropriations Committee and which do not? I say that as a member of the Appropriations Committee.

Mr. LONG. Mr. President, will the Senator yield for a question at that point?

Mr. SASSER. I shall certainly yield.

Mr. LONG. I am sort of in the dark in this matter. When did we agree that the peers would cut the melon or decide who gets this money? I have been around here for a while. I do not recall that I ever agreed to that.

Mr. SASSER. I say to my friend from Louisiana that I am not entirely sure we ever agreed 100 percent to cutting up the melon, as he phrases it. But I think that is the whole thrust of this argument.

It is not a process of cutting up a melon, it is a process of having these awards made by a particular process judged by those who are skilled in these matters and those with a proper scientific background to make a judgment.

Mr. DANFORTH. Mr. President, if the Senator will yield, the answer to that question is we decided that in the Deficit Reduction Act of 1984, where we provided a competitive procedure process for Government grants.

One of the specific provisions that we placed in the statute at that time was that:

The competitive selection for award of basic research proposals resulting from a general solicitation and the peer review or scientific review (as appropriate) of such proposals.

constituted competitive procedures which we stated was the policy of the Government that we wanted to put in place. We have taken a clear position in Congress in favor of a competitive rather than just "who can get to the Appropriations Committee first" standard. Also, as Senator Stevens pointed out and as I tried to point out, in the committee report on this bill there is a specific reference to the fact that we do not want to do this again. We recognized that apparently it is wrong and we do not want to do it and will never to do it again but we have done it in this bill.

Mr. SASSER. Mr. President, clearly the fact that we state in this bill that we will do it this one time and we do not do it again, we will not do it again, I think is some indication there are reservations on the part of many Senators that this is not good policy even though they may be getting the funds for universities in their State on this one particular occasion. I submit that this will be habit forming. Once we find we can go around this peer-review process and once we can secure funds for defense research projects in our State through the Appropriations Committee, then we just might as well throw the whole peer-review process out. That will be the end result and this problem will not be before us.

Mr. LONG. Will the Senator yield?

Mr. SASSER. I yield to the Senator from Louisiana.

Mr. LONG. Am I to understand that this is a situation, which is certainly without my

knowledge, where Congress said that we are not going to have any say about who gets this money; are we going to have some peers decide who gets the money? Is that what is involved here?

Mr. SASSER. I say to the Senator from Louisiana that the Congress set up the procedure whereby these funds were to be awarded. It was provided by statute by Congress. What we are seeking to do now in this one isolated incident is to go around the process that we have set up, the competitive award process, reviewed by peers, and award it in a different fashion. If you wanted to be unkind, you could say you are awarding it through the appropriations process, perhaps based as much on political consideration as other considerations.

Mr. D'AMATO. Will the Senator yield for a question?

Mr. HARKIN. Will the Senator yield?

Mr. SASSER. No; I am going to finish my statement, but then I will yield the floor.

The universities themselves should persuade their colleagues to cease asking Senators to grant special help in securing funding that could not be secured through the regular peer-review process. I know, as I said earlier, that the chairman of the subcommittee says that this is the only time we are going to do it; that it will come to an end after we do it this one more time. But I submit, gentlemen, that if we do it this once, it will be habit forming; we will be back again and again and again and we might as well just reject, throw out the whole peer-review process. I yield the floor.

Mr. PROXIMIRE addressed the Chair.

The PRESIDING OFFICER. The Senator from Wisconsin.

Mr. PROXIMIRE. Mr. President, the chairman of the Defense Subcommittee, the distinguished Senator from Alaska, said our amendment would cut out the \$80.6 million research funding. That is not true. The earmarking of \$80.6 million comes out of already appropriated funds. Our amendment leaves every dollar of that \$80.6 million available to the Pentagon and the university community. It simply permits the Department of Defense to award the money through open competition. None of these \$80.6 million in awards have been authorized. None have been awarded competitively. None have had the normal scientific review panel of experts to determine if the receiving institution is the best from the point of scientific quality.

Mr. President, the great credit in this amendment is that a cosponsor of the amendment is Senator Goldwater, who is not only chairman of the Armed Services Committee but is also a Senator from Arizona, which receives by far the biggest award. He recognizes that even though his Arizona State University would receive it, it should be done on a competitive basis, a professionally determined competitive basis, not on the basis of political pressure.

Now, Mr. President, the Secretary of Defense in a letter to various Senators has said:

The conferees' earmarking of research funds for specific universities, without merit competition, establishes a precedent that could jeopardize our preeminence.

The Secretary goes on to say that our universities are essential to our Nation's future and critical to the development of future defense systems.

We are now beginning to jeopardize that future, jeopardize our national security by allowing the competitive process to be voided.

Now, Mr. President, how many times have we voted on this floor for competition for defense dollars? Ten times? Twenty times? And today we are going to dismiss all those votes, all that pious language, all that concern and vote to forget competition, forget competitive awards but instead substitute political will. I hope not, Mr. President.

For a number of years the Congress has generally followed a policy of procuring scientific research from universities and corporations based on competition. The Congress has secured the services of professional experts to administer and judge the competition. With few exceptions this policy has served the country well. How do we know this competition and professional review has succeeded? The answer is in the results. A few months ago the Under Secretary of Defense for Research reported to the Congress that in the 20 most important areas of military technology, the United States leads the Soviet Union in 14. The two super powers were tied in six. So the Soviets lead in how many? Exactly none. Since the Defense Department is the prime user of this research, this excellent showing for American technology versus Soviet technology is particularly pertinent.

The professional competition system has worked well, but what happens if we abandon it? What could we expect if we rely on the kind of selection of scientific research represented by the projects for 10 universities included by the committee in the supplemental appropriation bill. Talk about an old boys' network. The old boys on the Senate and House Appropriations Committees and their special friends in the Congress would have a field day. There are few nicer things that a Senator can do for a colleague than hammer through the committee a multimillion dollar project for his friend's State when the friend is running for election in a few months. Without professionally supervised competition who determines which universities in which States get scientific research projects? Answer: the determination of projects is made in committee and on the floor. What is wrong with that? Committee members, especially majority committee members and particularly senior committee members have an initial advantage.

Now, Mr. President, this Senator has served for more than 25 years on the Appropriations Committee. I have yet to hear a single specific example of even one scientific research contract that has been unfairly awarded by this long-established and highly successful professional competition. Oh sure, there is a great deal of muttering and rhetoric against

this professional competition that has given this country's national security such a critical advantage over our prime adversary, but not one shred of evidence that it has not worked and worked well. And oh how easy it would be for a Senator to secure such evidence, if there were any. All he or she would have to do is to request the General Accounting Office to review any of the hundreds of contracts awarded by this professional competition over the years and come up with just one or two that were unfair or biased. None of the Senators attacking this system have ever done this. If the system is rigged or unfair, let them prove it. They have not.

States represented by the Senate and House leadership can be expected to do particularly well. And, of course, regardless of committee membership or majority or minority status, or seniority, the member who is aggressive, persistent, returns favors by giving his colleagues a special break for their State -- that kind of Senator or Congressman will do well.

On many controversial issues, you can find scientists speaking on many sides of an issue. There never is total agreement on a controversial issue. But on the issue before us today, there is universal agreement in the scientific community. The Defense Department opposes these earmarkings. The Association of American Universities opposes these earmarkings. The National Association of State Universities and Land Grant Colleges opposes these earmarkings. The National Academy of Sciences -- perhaps the most prestigious scientific body in the world -- opposes these earmarkings.

Now let us put this issue in perspective. When it comes to research grants \$80.6 million is a lot of money. This \$80.6b million will go to 10 universities who did not compete fairly for this money. They will not get the grant the old fashioned way -- they will not earn it. They will have it handed to them.

And this means that perhaps 10 other universities will not get grants even though they deserve them -- even though they would have won out on competitive grounds, even though they would have made better use of the money.

Who is going to lose out so these 10 universities can win? I can tell you. Universities in Alabama, Alaska, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Mississippi, Nebraska, Montana, Missouri, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming. All losers.

Every one of these States has universities or colleges qualified to bid competitively for these awards. But the door will be shut to 42 States because a few have taken advantage of the political process.

[The following proceedings occurred after midnight:]

Several Senators addressed the Chair.

The PRESIDING OFFICER. The Senator from Arizona.

Mr. DeCONCINI. Mr. President, I oppose the amendment offered by the Senator from Missouri.

I think there is a fundamental flaw here that a lot of Members do not understand.

First, let me say up front that there is no question that the State of Arizona is a big beneficiary for the first time; and if it is the last time, that is fine. But to cut this out merely because of an argument that one State happened to get in, does not make any sense. That is why we are here opposing this amendment -- because States do not get in.

Take a look at this. This map indicates what States get in. Over 50 percent of the Federal research money goes to 16 States every year. Where are the other States?

We have a right to compete. We cannot compete. I am proud of my Arizona State University and the science and engineering technology center they have proposed, but they have done it without any Federal help so far because it all goes to the elite eastern or California high tech schools. It is time we call a stop to that. We are talking about peer review. Well, let us make peer review equitable, not just of the elite.

Mr. LONG. Mr. President, will the Senator yield?

Mr. DeCONCINI. I yield.

Mr. LONG. The way it was explained to me by someone from my part of the country is that to get the money by this peer review, it helps to be a peer, one of the group.

Mr. DeCONCINI. That is right.

Mr. LONG. The question then is, how do you get to be one of the peers? The answer is, you do not. You just stay where you are.

I do not know of anything in here for Louisiana, and I am not talking about taking anything for Louisiana. But if Louisiana is going to get something, I would rather depend on my colleague on the Appropriations Committee than on one of those peers.

I know a little about universities; I have a couple of college degrees. I know something about college professors; I have had something to do with them. From what I know about them, they have their brand of politics, just as we have ours; and they have their old-boy network, just as we have our old-boy network.

The armed services have their old-boy network. You had better be careful if you try to help some soldier who gets in trouble. You have to be careful how you help that guy, if

you do at all, because they have their brand of politics. When somebody goes outside their brand of politics, he has made the mistake of his life. If a serviceman goes to talk to his Senator, the Senator should know how to do it. It should fit the military establishment's way of doing things.

I was not aware that Congress had taken itself out of this. I understand that we did fix this thing so that they can have this competition and suggest how the money should be split, and Congress has pretty well respected that procedure. But my understanding of this -- what little I know about it -- is that when we gave these peers the right to recommend, we did not say Congress was not going to have something to say about it. We still left Congress the right to do what the Senator is trying to do for his State -- that is, to plead his case and hope Congress might be willing to recognize the merit of the case and vote for it.

To say that Congress had taken itself out of it came as news to me.

Now I understand why Louisiana has been getting so little. I did not know about it.

It seems to me that while it is nice to have whatever peer review they want, to say Congress would not have the opportunity to hear the plea of any Member of this body and to review what the peers are doing, to say that is fine but here is something that ought to be added to the list -- to say we surrendered, that comes as news to this Senator. Apparently, we did not completely surrender. Otherwise, the Senator would have been ruled out of order. He had a right to offer the amendment. Is that correct?

Mr. DeCONCINI. That is correct. I did not offer the amendment. The Senator from Alaska, the chairman of the Defense Subcommittee, did as part of his recommendations to the committee.

This is in the bill for good, sound reasons. I am more than happy to debate anybody who thinks Arizona State University does not have the capability.

The Senator from Louisiana is right: The universities in Louisiana will not have a chance because they are not part of the peer group.

Mr. LONG. A man who is regarded as one of the ablest and smartest Senators is Robert S. Kerr of Oklahoma. I learned from him, as others did who served with him. He used to say, among other things, that he was against any combine he was not in on.

I say to the Senator that if he is in on this combine, perhaps he should stand by it. But if he comes from a State that is not getting any benefit out of this thing, I suggest that he vote to respect the precedent; and the Senate, if it wants to, can add somebody to that list; because, based on what I hear, this thing has its own old-boy aspects. Those universities getting the money have a habit of continuing to get the money, and those who have not been getting the money seem to have a way of continuing not to get money.

Mr. DeCONCINI. That is exactly the problem. That is what we are really going to talk about here -- the peer review system.

One look at the universities that received the research money shows beyond a shadow of a doubt that unless your university is on the east or west coast, you are picking up the crumbs, if anything, of any Federal research dollars.

The map I just showed indicating R&D funding, looks as though the heartland of America, from Iowa down to Louisiana and westward to the Arizona-Nevada western border, has been virtually shut off. That is what has happened.

No one can tell me that the northeastern universities, the elite schools, has cornered the market on research and development. They are good schools, but they also control the peer review. No one can convince me that Iowa, Arizona, Louisiana, the Dakotas, and many more cannot be part of this process. I do not know how else to get them in as part of this process.

I would be willing to legislate a peer group that was chosen from a hat, and I would throw my State into the hat, but that is not practical. I would be glad to take my chances there.

This is a set up to cut the deal before Louisiana, Arizona, or any other State can get an opportunity to get in.

No one can tell the Senators representing the great Southern universities that unless their university is located north of the Mason-Dixon line, they cannot compete with the schools in Massachusetts and other Northeastern States. No one is going to stand here and take that. Sure, they have their self-perpetuating peer groups, so it is comfortable. So why let anybody else in? When you think about it, is that what we are to do here? I do not think so.

Data compiled by the National Science Foundation in January of this year shows that in fiscal 1984, the last full year of available data, 50 percent of all Federal research and development funding was put into the hands of 16 Eastern and west coast universities, 50 percent.

That amounted to \$4,173 million in fiscal year 1984, spread out over 16 universities.

I do not have to tell you how many fine universities there are in this country.

Another \$550 million was put in the hands of four Midwestern universities with the University of Wisconsin receiving nearly \$100 million in Federal R&D.

Mr. LONG. Will the Senator say what university it was received how much of that?

Mr. DeCONCINI. The University of Wisconsin receiving nearly 100 million in R&D.

Mr. LONG. I am glad Senator Proxmire's State is not left out.

Mr. DeCONCINI. I am glad the Senator from Louisiana asked me to stress that.

Mr. LONG. He cannot understand what the problem is.

Mr. DeCONCINI. The Senator knows what the problem is like I do.

The fact is someone at Wisconsin University is probably on this peer group. I cannot tell you who it is, but I bet you if we got the peer groups up that would be the case.

The University of Wisconsin was ninth among all universities in receipt of National Science Foundation funding and that is not to degrade that university. It is a great university and it ought to have research funding. But I think the Arizona State University and others -- --

Mr. PROXMIRE. Mr. President, will the Senator yield since he mentioned my State?

Mr. DeCONCINI. I yield without losing my right to the floor.

Mr. PROXMIRE. The fact is the University of Wisconsin has won every single one of those awards on the basis of competition, professionally administered competition.

What is wrong with that?

Mr. DeCONCINI. If the Senator is finished, I am not opposed to the competition. It is the peer group that awarded it. I would like to see Arizona University or LSU or some others have someone on the peer group and a chance to compete. If they cannot compete, fine.

Mr. PROXMIRE. All the peer group does is determine who is qualified for competition. That is all. You have to have someone do that. You have to have the outstanding scientists and the best universities do that.

Mr. DeCONCINI. My question is, Why should the peer group be controlled by these universities?

Mr. HARKIN. Mr. President, will the Senator yield?

Mr. DeCONCINI. No. I am going to finish and then yield the floor.

Also, Mr. President, my colleagues should not lose sight of the fact that some of our most critical national laboratories and research centers have budgets totaling hundreds of millions of dollars that are not subject to peer review scrutiny.

Let me give you just a few of those with their fiscal year 1984 estimated budgets. The

University of California Lawrence Laboratories, \$690 million; the University of California, Los Alamos Scientific Lab, \$424 million; Cal Tech Jet Propulsion Lab, \$554 million; Stanford Linear Accelerator Laboratory, \$117 million; MIT Lincoln Laboratory, \$255 million; Princeton Plasma Physics Laboratory, \$132 million; and Brookhaven National Laboratory, \$173 million.

I feel like a real piker here tonight because I am asking for \$25 million to be considered to go for research study and development for a center at Arizona State University.

I do not know why it ought not to have a chance when it cannot get on the peer group. I would settle for that.

If someone wants to offer a substitute amendment to the Senator from Missouri's permitting every State to be on the peer group, particularly my State, I may consider that in lieu of trying to fight for what I think is right and what I think is wrong with this process.

Mr. President, by earmarking funds for certain national research centers in this bill, Congress is saying that there are other universities that can make a contribution to our national defense and national research effort. Nothing more, nothing less.

It is high time that we unleash the tremendous research and development potential of the University of Arizona and Arizona State University and literally hundreds of other universities that ought to qualify, whether they be Wichita State in Kansas, Oklahoma State University, Rochester Institute of Technology, Iowa State University, the University of Nevada, or dozens and dozens of others.

Finally, Mr. President, the sponsors of the amendment will refer to these research projects as somehow being "pork barrel" or "ornaments on a congressional Christmas tree." Frankly, I resent that because that is not the case.

This money will be spent on good research if it is spent in Iowa or Kentucky or Illinois or Indiana, or wherever.

But why should we not have an opportunity? The Federal research is not something sinister. It is not a rip-off of the taxpayer.

It is easy to say for those States who are already hooked on this peer review life support system that feeds them annually with hundreds of millions of dollars of research. It is easy to say for those who historically have been a member of that prestigious peer merry-go-round that consistently pumps millions of dollars into these universities. "Forget it, guys, we want to compete. We want the competition process because we control it."

I think time has come that we defeat this amendment offered by the Senator from Missouri and that we stand with the Appropriations Committee bill.

Mr. President, I ask unanimous consent that a May 30 article in the Wall Street Journal on the importance of gallium arsenide microchip technology be printed in the Record.

There being no objection, the article was ordered to be printed in the Record, as follows:

MILITARY NEEDS RENEW INTEREST IN GALLIUM-ARSENIDE MICROCHIP

(By Eileen White)

The Demands of electronic warfare-tracking, jamming and communications systems that will form the brains of the next generation of weapons systems -- are powering a Pentagon search for smarter and faster computer chips.

The search has stirred renewed interest in gallium arsenide, a compound that 10 years ago showed bright promise as a basis for computer chips. That notion was generally abandoned because a market for the chips failed to materialize. But the Pentagon could change all that because gallium arsenide is said to be uniquely suited to its new military electronics systems. With the Defense Department planning to assume some of the development risk through research-and-development grants, gallium arsenide is becoming a "hot area" in defense electronics, says Fred Alexander, general manager of the electronics and technology division of TRW Corp.

The expected uses range from "smart" missiles that would be self-guided by tiny microprocessors to satellites that would provide ship-to-space communications for aircraft carriers. The Air Force's Stealth bomber and advanced tactical jet fighter are being designed with a host of sensor, guidance and communications systems that must be integrated in compact on-board computers.

Such systems must receive and process communications signals from different sources at breakneck speed. That requires chips that perform analog, or sound wave, functions and quickly convert them to digital signals for data processing. They must operate at the microwave and millimeter wave frequencies, the upper end of the FM sound spectrum, where it is possible to achieve transmission with greater resistance to interception and jamming than is now possible.

Computer chips that meet all these needs aren't available commercially. Chip makers continually are developing faster silicon chips, but silicon isn't capable of processing as quickly as the new military systems demand. Moreover, silicon chips aren't currently capable of analog processing, and they deteriorate in the high-radiation environment that exists during electronic warfare.

Electronics companies have spent several years on plodding research into the properties of gallium-arsenide chips, which carry analog signals well. The compound processes electronic signals at about five times the rate of silicon with twice silicon's resistance to radiation. However, it is difficult to work with, yielding only about 8% to 18% useful chips per production batch, compared with 70% for silicon. That has helped push the

chips' unit cost to about \$200, compared with about 70 cents for silicon.

At such a price, the few commercial products already developed with gallium-arsenide chips -- mainly satellite receivers and sound amplifiers -- haven't found a wide market. And even the military has been slow to find uses for gallium-arsenide chips because of a lack of reliable development and test information.

The lagging industry participation has prompted the Pentagon to take the lead with a \$135 million program to develop useable gallium-arsenide chips beginning next year. The program is known as Mimic, for microwave/millimeter wave monolithic integrated circuit, the technical name for a gallium-arsenide chip. At least 23 companies, including General Electric Co., Honeywell Inc. and Westinghouse Electric Corp. are expected to vie for funds.

Because one criterion is company-funded investment, numerous companies have already constructed facilities to make and test the chips. Avantek Inc., Santa Clara, Calif., and Sanders Associates Inc., Nashua, N.H., recently spent \$30 million and \$20 million, respectively, on gallium-arsenide "foundries."

Besides an interest in selling to the defense electronics market, the companies hope the Pentagon money will spur the lagging U.S. commercial market for Mimics. Japanese electronics companies are said to be investing heavily in gallium-arsenide research, mainly because its speed allows advances in parallel processing that are central to new generations of supercomputers.

Hughes Aircraft Co., which has spent about \$50 million on Mimic research, says its expected participation in the Pentagon program should allow it to see a return on its investment in three or four years. Otherwise, "it would be 12 or 14 years before we'd get a return on our investment," says Eugene H. Gregory, a Hughes manager. Hughes' parent, General Motors Corp., has already asked for a study of whether millimeterwave radar could be used in automobiles, he notes.

The injection of federal money, which could rise to as much as \$1 billion over the next 10 years, has prompted some rosy market projections. Henderson Electronic Market Forecast, Los Altos, Calif., says market demand for gallium-arsenide products will grow to \$5 billion in 1996 from a current \$240 million.

Similar forecasts a few years ago were miserably off the mark. Now the military market - - including the Strategic Defense Initiative office, which is sponsoring research in digital uses of gallium-arsenide chips -- is expected to make the difference.

It was Pentagon money in 1979 that created a market for very high speed integrated circuits, which have since proven a huge commercial success. E. D. Maynard, who directed that program at the Pentagon and is in charge of the Mimic program, hopes for a repeat performance. "We'll make it possible for venture capital to take the result and run with it." he says.

Mr. WEICKER addressed the Chair.

Mr. STEVENS. Will the Secretary yield before he leaves the room?

The PRESIDING OFFICER. The Senator from Connecticut.

Mr. WEICKER. Mr. President, I am somewhat constrained to move to table this amendment. I think we have discussed it in rather great detail. I am not going to do that if it is going to offend anyone, but I have to say this, that the subject matter which we are referring to here today, in the main, has been entrusted to this Senator and his subcommittee both in terms of the universities, in terms of grants to the various centers, cancer centers, Alzheimer centers, various scientific endeavors, et cetera, which all falls under the aegis of the Subcommittee of Labor, Health and Human Services.

I and the other members of the subcommittee are well aware of our responsibilities and certainly 99 percent of what occurs under the peer review process. But to say that that does not allow the individual Senators to make a case for circumstances within their State, then there is not much point in having an Appropriations Committee or indeed to act as a U.S. Senator.

I am going to tell you right now, considering the status of priorities in this Nation, nothing delights me more than when every one of you interest yourself in a university or in a cancer center.

The priorities are so damn out of whack -- I mean this fellow controls almost all the money in the budget for defense and it is hard to get anybody excited about the business of life, whether it is knowledge, science, or whatever.

The more that you do, the more that you interest yourself in these matters, the better it is for the whole budget.

I think you will all agree as you have made your requests, it is not going to be a pork barrel process at all. Invariably what we are talking about is helping the less fortunate. It is very little political reward for the type of matter that we are discussing here today.

So, without in any way denigrating the comments of those who propose the amendment, I also have to say I am very proud of both our profession and the work that it has done within that profession insofar as the U.S. Senate is concerned. There is nothing to apologize for.

Now, with those brief comments, I would hope that we could get on with the business of voting in terms of a tabling motion on the amendment, and certainly I do not want to foreclose anyone else from demanding that it is thoroughly covered.

Mr. HATFIELD. Mr. President, if the Senator will yield a moment, before he makes a

motion, I just want to make a comment here. I plead with the Senate to delegate its basic authority and its responsibilities from time to time. The word "peer review" and all these other procedures that are used to reallocate money that we have appropriated for various and sundry programs, projects, and activities, designates the idea of a group or individual experts. They are going to make, then, the reallocation of the appropriation and those experts may have a different system of priorities, whether it is a peer review of an independent outside group or whether it is in agencies of our executive branch of Government.

If I had kept track, I would have imagined that every Member of this body has at one time or another approached the Appropriations Committee and asked us to put a higher priority on some particular problem, or project, or activity in their State overriding the experts, because we never have abdicated our ultimate responsibility to determine where those appropriations shall go, whether it is in the Defense Department, whether it is in the Education **Department**, or whatever, whether it was the Baltimore Harbor as an example, and this evening we took a \$25 million earmarked from the Senator from Ohio to address an emergency flood situation in Ohio.

We circumvented the process because we exercised a legislative prerogative. Now you begin to abdicate in one area the legislative prerogative to establish priorities or to establish earmarking, and we have set a precedent. And I would say, even the Senator from Missouri has approached me on occasions on other projects within that State, as every Senator has.

(Mr. COCHRAN assumed the chair.)

Mr. **DANFORTH**. If the Senator will yield, because he is referring to me, have I approached the Senator from Oregon on the basis of university research? Have I ever asked the Senator from Oregon to replace the judgment of professionals and experts as to where the highest quality of defense research is conducted? Have I ever suggested that politics and favoritism to the Senator from Missouri should replace the desires of the Department of Defense to spend its money wisely according to where research capability exists?

Mr. **HATFIELD**. If the Senator had been listening, I said the equivalent of "peer review" has its application in all the appropriations that we exercise; that agencies such as the Corps of Engineers has a certain set of priorities and projects, and we have replaced those projects on occasion. The Department of Education has certain systems of allocations and we have replaced those on occasion. Whether it is a lock or a dam or whether it is a flood or emergency, we have exercised the legislative prerogative of overturning a system of priorities and allocations. Therefore, I would say that this is something we ought to retain to ourselves to overcome any system that we set up or any procedure.

Mr. **DANFORTH**. Mr. President, if the Senator will yield just for one question.

Mr. **WEICKER**. Mr. President, I want to establish that I believe I have the floor. I yielded

for a question to the Senator from Oregon.

The PRESIDING OFFICER. The Senator from Connecticut has the floor.

Mr. WEICKER. I am glad to yield for a question to the Senator from Missouri.

Mr. **DANFORTH**. I appreciate that. I just wonder if the Senator really believes that the decisions on the matters such as microelectronic engineering and supercomputers and semiconductor research are of the same quality as where a harbor should be located? I mean, is there any expertise in the U.S. Senate? Is there anything other than pure muscle that is brought to bear in the Senate to make decisions such as that? I suggest that it is a qualitatively different kind of situation.

Mr. HATFIELD. I will state to the Senator that we have done that, yes. We have in 1982, in the electric energy system storage section, the Senate Appropriations Committee recommended funding \$2.9 million for continued development of the Wisconsin Superconducting Magnetic Energy Storage Project. We have done many such projects.

Mr. WEICKER. Mr. President, at this juncture, unless there is a brief question I can respond to, I am prepared to move to table the amendment.

Mr. HARKIN. Will the Senator yield?

Mr. WEICKER. I am delighted to yield for a question from my good friend.

Mr. HARKIN. Or a statement.

Mr. WEICKER. For a question.

Mr. HARKIN. OK. I will ask the Senator a question.

I think the argument has been made by the distinguished Senator from Arizona and the Senator from Connecticut and the distinguished chairman of the Appropriations Committee have very succinctly wrapped this argument up. But I would be remiss if at least one point was not clarified as it relates to the question just raised by the Senator from Missouri for the proponents of the amendment.

The question is basically this: Is there or is there not a "peer review" process within the Department of Defense as it relates to these projects? We have two issues here. Everyone is talking about "peer review," but there is no "peer review" in the Department of Defense at all. The "peer review" applies to NSF and other projects.

This whole thing has been clouded up by arguments of "peer review." What we are talking about here is within the Department of Defense, and there is no "peer review" within the Department of Defense. There is only professional reviews -- just as the distinguished chairman of the Appropriations Committee pointed out as there is in every

other agency -- professional reviews of where they ought to put it.

What we are saying here is that professional review is not a "peer review." These projects do not go out among a bunch of universities to decide which is best. It is done only within the confines of DOD. So do not be confused. We are not talking about a "peer review" process here.

I thank the Senator for yielding.

Mr. WEICKER. Does the Senator from New York have a question?

Mr. D'AMATO. Mr. President, I would like to ask my distinguished colleague from Connecticut if he has known of any "peer review" program as it relates to the funding of university construction and renovation. That is what we are talking about in this area. Because the fact of the matter is that until this year, 1986, there have been no funds whatsoever set aside for this. It is really a specious argument. Because if it was not a specious argument, as the Senator from Arizona has said, there are those who want to control. They are not even willing to let the universities develop a microelectronic engineering center. They could never even compete for those defense contracts and other contracts. So you have the Rochester Institute for \$11 million to have a microelectronic engineering center that will provide 25 percent of this Nation's engineers. There is not one person who has ever addressed the merits of any of these programs.

It is a peer review. It comes under those great words "peer review."

The fact of the matter is there has not existed any peer review for construction and renovation. That is what we are talking about at these facilities.

Mr. EAGLETON. Mr. President, the question we face today, in one sense, is the same question we face so often. How are we going to fix it so the folks back home get more next year than they did this year? We can all recall debates over formula changes. Rarely a word was heard on how this or that change would improve the purposes of the program. Instead, the bottom line was, "How much more money is my State going to get?"

In recent years, we have developed a new art form for funneling money back home, We do it on an institution "specific" basis. Back in the halcyon days, we simply added money to this or that account in an appropriations bill and specified, through the committee report, that the additional money was for a particular institution. In virtually every instance that I recall, the additional funds were to be used to establish a new program or to build a new facility at a college or university.

Then budgets got tight. There was no longer the ability to add money to bills. So the game changed to "earmarking" amounts from a given account and directing in the statute itself that the funds go to a particular college or university. We started robbing a whole bunch of Peters to pay one or two Pauls. And the accounts that usually got tapped were research funds.

The provision in the committee bill before us now is becoming a classic case in point. This bill, this "Urgent Supplemental," makes \$55.6 million available as grants to 10 separate good old States universities. I should add that the committee report states that this is the last time good old State university can come to the well. They do not "intend to consider or approve any future requests for specific universities or research institutions for projects that are noncompetitive and do not comply with legal requirements for merit reviews and competitive contracting."

Mr. President, laudable as the committee's stated intent may be, it is simply too late. We should never have gotten into the business of sidestepping the competitive system of research projects. What has always been bad public policy is growing worse public policy. We should not be about the business of deciding which projects in the National Institutes of Health or the National Science Foundation or the Defense Department are funded. We do not know enough to make those judgments. We are turning a competitive, peer-reviewed process into pure and simple politics. And that is just dead wrong.

I urge my colleagues to join with Senator **Danforth** in putting a stop to this practice now, not next month, nor next year. Let us turn the research program back to the experts who know, far better than we, which university will do the best job.

Mr. BENTSEN. Mr. President, I am pleased to join in cosponsoring this amendment to help restore competitiveness -- at first in the award of defense research projects to universities and ultimately in American science and technology. I do not believe that I am overstating what is truly at stake in this matter.

The immediate issue in this bill is whether to legislate contract awards for university research programs for the Defense Department. But this is just one part of the bigger picture of how to strengthen our national R&D efforts.

Since defense R&D has been growing rapidly, it is understandable that universities and scientists have turned their attention to the Pentagon as a source of vitally needed funds.

Unfortunately, some institutions have bypassed the normal process of competition, peer review, and selection based on merit.

In recent years, there has been a growing trend toward congressional earmarking of funds for home-State institutions. This year, in this bill, the pork barrel for science got too big.

This amendment is aimed at 11 projects in eight States costing a total of more than \$80 million. Not one has been requested by the Defense Department. Not one has been authorized by Congress. And not one would be subject to the established procedures for scientific competition. In my book, those are three strikes against such projects.

The established, competitive process may not always be perfect. I am sure that bias or favoritism sometimes creeps in. And I certainly understand and share the desire of

Senators to help their home-State universities get fair consideration for their research proposals. I recognize, however, that the ultimate decisions should be made on the basis of expertise rather than politics.

I am sure that each institution which has money earmarked for it in this bill has highly competent people who could use those funds productively. I am sure that the projects in question sound meritorious, that a case could be made for doing something like this somewhere. But I am also sure that 535 Members of Congress are a cumbersome and ill-equipped group to make such evaluations.

We tend to be more interested in where a project is than what it is. That is an important criterion for some Government programs, but not for basic scientific research.

Nor should the random luck of committee assignments determine the direction of such research contracts. If we want to get the most for our money, and the best out of our best people, we should promote politics-free R&D.

Mr. President, I am aware of the Appropriations Committee's report language promising not to "consider any future requests to earmark DOD research and development funds for specific research projects that have not gone through competitive, merit review processes without specific authorization." It so happens that this horse is still in the barn. There is still time to close the door on these noncompetitive earmarks by approving the pending amendment.

This issue is only a small part of a much bigger challenge -- to strengthen American science and technology and thereby our economic competitiveness.

Last February, the White House Science Council's Panel on the Health of the U.S. Colleges and Universities completed its 4-year study and submitted its report through Chairman David Packard. That panel made the linkage explicit:

The strength of the Nation in trade, defense, and health has been directly related to past investments in science and technology. Our future position in global markets will similarly depend on our willingness to respond to opportunity and to mobilize our strengths today. To this end, we must promote a broad interdisciplinary approach to problem-solving by focusing on university-based centers that will improve cooperative linkages between scientists, engineers, and industry.

The Packard panel recognized that research in universities is fundamental to our entire scientific and technological capabilities:

An economy whose growth prospects depend upon maintaining a competitive edge in technology must look to an increasing -- not decreasing -- emphasis on the source of this technical talent.

Mr. President, I have long believed that research is the basis for technological innovation,

and that innovation has given America unparalleled progress -- creating jobs, advancing productivity, and prompting gains in real income. For comparatively small investments in R&D, we have obtained remarkable returns. Even narrowly focused governmental programs for defense and space have led to enormous benefits and advances for U.S. science and industry.

The industrial sector of our economy has recognized its long-term dependence on R&D by increasing its funding of such activities by over 6 percent per year in constant dollars for the past decade. Since 1980, in fact, business has spent more each year on R&D than the Government has.

Despite these encouraging signs, there are ominous trends. Federal Government investments in defense-related R&D have been climbing rapidly at more than 11 percent per year since 1980, but spending in nondefense applied research and development has been falling each year by nearly 12 percent. As a consequence, the nondefense share of Federal R&D has fallen by almost half, from 50 percent at the end of the 1970's to 28 percent this year.

Mr. President, America needs a strong and growing research effort for our national defense. But I am concerned that we may be neglecting other important areas, that our emphases may have become unbalanced. Both West Germany and Japan devote larger fractions of their GNP's to non-defense research than does the United States. We have to work to stay competitive with those nations, as well as the Russians.

If these trends continue, American science and technology may fall behind, first in one sector and then in another, perhaps for a whole generation. We must always take care to direct our R&D efforts wisely and with a long horizon. This is true even with defense R&D, where the budgets have been expanding. Our funds are still limited, so they must be spent where they will be most fruitful.

Approval of this amendment will signal our determination to reject pork barrel science so that we can pursue the highest quality research efforts that our Nation needs.

Mr. HEINZ. Mr. President, I would like to associate myself with the remarks of the sponsors of this amendment. The subject of the amendment is crucial not only to our national security, but to the future of rational management of Federal funding for research.

I am struck by the irony of the Congress in attempting to earmark research money for specific institutions without going through the standard competitive selection process. Just 2 weeks ago, this Senate, by an overwhelming vote, gave its approval to the most significant defense reorganization plan in decades. One of the core elements of that legislation is the reduction of congressional micromanagement. It was recognized that excessive congressional involvement in funneling Defense Department money was one of the causes of the inefficiency and waste that have undermined much of the public consensus behind higher defense spending.

And yet here we have one of the worst examples in some time of the kind of congressional micromanagement that we have pledged ourselves to reduce. In fact, if you look at the Appropriations Committee report on the urgent supplemental, it is clear that the committee itself is aware of how its action in earmarking research funds violates all common sense. The report states that the committee will, and I quote, "not consider any future requests to earmark DOD research and development funds for specific research projects that have not gone through competitive, merit review processes without specific authorization." If you detect a guilty tone in that statement, you are on the mark.

The committee is saying, let us do it this one time, and we promise to never earmark research funds again. We should all be asking ourselves, why do it this once? If it is a bad idea for future research budgets, it is a bad idea for this one too.

Some of the best changes that have come along recently in defense procurement involve competitive contracting. Congress has pressed the Pentagon to compete everywhere it makes economic sense. Our main concern has been to drive down excessive prices. But when it comes to competition for scientific research funds, another factor, quality, is at stake. It is a giant step backward for our approach to defense budgeting to earmark funds in an area where competition is recognized as crucial in putting our money to the best possible use.

No one in this Chamber fails to help his or her State whenever possible. That is a central, and honorable, part of our role here in the Senate. But we have traditionally approved research projects on a merit basis. It is, obviously, vital to the quality of our research effort that we do so. How can Senators go home to their States and explain to universities who have competed for Federal research funds that other universities have played by other rules? How can I return to Pennsylvania, where several fine academic institutions have received money through competition in the Federal Scientific Research Program, and report that millions of dollars have been handed out to other universities not on the basis of quality, but on the basis of Senatorial committee assignments?

Our national security rests to an extraordinary degree on our technological superiority. The latest Pentagon report shows the United States with a technological lead over our main rival, the Soviet Union, in many militarily significant categories. We are equal in some cases, and in some areas of United States advantage the Soviets are pulling abreast. We cannot play with this part of our defense budget.

Mr. WEICKER. Mr. President, I move to table -- incidentally, so that no stigma might attach to one of these peer universities, let the record show that the Senator from Connecticut, who comes from one of those peer universities, is the one moving to table the amendment of the distinguished Senator from Missouri who comes from the same peer university.

Mr. DOLE. What university is that?

Mr. WEICKER. Mr. President, I move to table the amendment of the distinguished Senator from Missouri, and I ask for the yeas and nays.

The PRESIDING OFFICER. Is there a sufficient second? There is a sufficient second.

The yeas and nays were ordered.

The PRESIDING OFFICER. The question is on agreeing to the motion of the Senator from Connecticut [Mr. Weicker] to table the amendment of the Senator from Missouri [Mr. **Danforth**]. The yeas and nays have been ordered and the clerk will call the roll.

The assistant legislative clerk called to roll.

Mr. SIMPSON. I announce that the Senator from Florida [Mrs. Hawkins] is necessarily absent.

Mr. CRANSTON. I announce that the Senator from Mississippi [Mr. Stennis] is necessarily absent.

The PRESIDING OFFICER. Are there any other Senators in the Chamber who desire to vote?

The result was announced -- yeas 40, nays 58, as follows:

(See Rollcall Vote No. 117 Leg. in the ROLL segment.)

So the motion to table was rejected.

Mr. STEVENS. Mr. President, in view of the action on this amendment, it is going to mean that it is in the bill, the House provision, is that correct? If we accede to this now, there would remain in the House bill the universities selected by the House conferees. I just want everybody to understand that. The effect of what you just voted on is to delete all the universities added by the Senate conferees. I think the record ought to be clear that the chance of that House provision coming out is rather nil. A substantial portion of it was added at the specific request of the Speaker of the House.

Mr. **DANFORTH**. Mr. President, I do not believe that is correct. If the Senator will look at the section on page 25 of the bill, section (c), I believe the answer to that is that it is to strike the earmarking.

Mr. STEVENS. Mr. President, if we delete the Senate amendment, the House provision remains in the bill. There is nothing we can do to take it out. The House provision will go to the conference. We all know that. I just want the Senate to know that as far as I am concerned, I am willing to accept the judgment of the Senate, but I hope you realize you have assigned us an impossible task if you think we are going to take out the House earmarking for universities that are not made under peer selection.

The PRESIDING OFFICER. Does the Senator from Missouri yield the floor?

Mr. **DANFORTH**. Mr. President, I do not believe the Senator from Alaska is correct. That is clearly not the intention of the amendment, to strike earmarking from the bill. I believe that is accomplished by the amendment.

The PRESIDING OFFICER. Is there further debate?

Mr. **HATFIELD**. Mr. President, I would only say that it is in the House bill and therefore it is in conference with the Senate. It is out of the Senate bill and, therefore, the House bill stands. For us to delete it from the House bill I will assure the Senate will not be possible. Therefore, the House identification by the House Members will get those assignments that they have made in that bill and we go without any assignments in our bill. It is very simple.

Mr. **PROXMIRE**. Will the Senator yield for a question?

Mr. **HATFIELD**. Yes.

Mr. **PROXMIRE**. Is it the message to the conferees to knock out the House selection of allocation without competition?

Mr. **HATFIELD**. The Senator has been in conference before and fully understands the way those bills are presented in the House of Representatives and the likelihood of the Senate prevailing in that conference is nil, particularly when none of those projects went into the House bill without the Speaker's approval.

Mr. **GRAMM**. A parliamentary inquiry, Mr. President.

The PRESIDING OFFICER. The Senator from Oregon has the floor.

Mr. **HATFIELD**. Mr. President, what is the question before the Senate?

The PRESIDING OFFICER. The question before the Senate is the amendment of the Senator from Missouri.

Mr. **GRAMM**. Will the Senator yield for a parliamentary inquiry?

Mr. **HATFIELD**. I am happy to yield to the Senator from Texas for a parliamentary inquiry.

Mr. **GRAMM**. Mr. President, I would like to inquire as to whether there is a listing of specific universities in the House provision of this bill.

The PRESIDING OFFICER. The Chair will respond to the inquiry. The amendment

seeks to strike language in the Senate bill. It does not propose to strike language from the House bill.

Mr. GRAMM. But in the vehicle before us, in the bill before us, there is no specific listing of universities chosen by the House that would remain in the bill that is to be up for markup to this point.

The PRESIDING OFFICER. The managers should respond to that.

Mr. STEVENS. The House provision on page 28 deleted by the Senate provision specifically earmarks the funds which the House wished to earmark which is \$24,600,000 for the Northeastern University of Massachusetts and the Rochester Institute in New York.

Mr. JOHNSTON. Mr. President?

The PRESIDING OFFICER. The Senator from Oregon has the floor.

Mr. HATFIELD. I yield.

Mr. JOHNSTON. As one who was in favor of tabling the last amendment, I think it is correct, however, to say that the action of the Appropriations Committee was to strike the House language and add in these projects from the Senate.

The amendment just adopted simply struck the Senate projects but did not go back and unstrike the striking of the House language so that the House language is still stricken. So when we go to conference all the projects will be stricken out.

Mr. HATFIELD. In the Senate version.

Mr. JOHNSTON. In the Senate version. So we will go to conference with the House version where the House projects are in and the Senate projects are out.

The PRESIDING OFFICER. Is there further debate on the amendment? If not, the question is on agreeing to the amendment.

Those in favor will signify by saying aye; those opposed nay.

In the opinion of the Chair, the noes have it.

Mr. DANFORTH. Mr. President, I ask for the yeas and nays.

The PRESIDING OFFICER. Is there a sufficient second?

Mr. DANFORTH addressed the Chair.

The PRESIDING OFFICER. Is there a sufficient second?

Mr. DOLE addressed the Chair.

The PRESIDING OFFICER. The majority leader. Mr. DOLE. Mr. President, before we start another rollcall vote, I want to remind my colleagues, I am not certain how many amendments we have on the Democratic side, but I am advised that on the Republican side, there are four amendments, approximately 6 or 7 hours of debate, with 7 or 8 rollcalls. That will take 2 or 3 hours. There are 12 to 14 amendments that could be accepted.

I understand on the Democratic side, there could be as many as 10 or a dozen amendments. Some of those are substantial.

I wonder if we might have some indication of whether we can reach some agreement, some time agreement on the remaining amendments or whether the chairman could indicate how much longer he might wish to proceed. I assume on some of these -- we have spent 1 hour and 35 minutes on this amendment, an \$84 million amendment. Some of the others, I assume, are just as controversial.

I am just wondering what the wish or the desire of the chairman might be at this time.

Mr. HATFIELD. To move on to complete the bill.

Mr. DOLE. Tonight?

Mr. HATFIELD. Yes, Mr. President.

Mr. **DANFORTH** addressed the Chair.

The PRESIDING OFFICER. The majority leader has the floor.

Mr. **DANFORTH**. Will the majority leader yield for a question?

Mr. DOLE. Yes, Mr. President.

Mr. **DANFORTH**. I do not think the Chair has ruled on whether or not there is a sufficient second. I would be delighted, if it would expedite matters, to withdraw the request for the yeas and nays and to resubmit the amendment to another voice vote. Or we can have the yeas and nays, if that is the pleasure of the Senate. I believe the Senate has spoken on it. It seems to me we would save about 20 minutes or a half hour, as rollcall votes go. I am not going to agree to a division.

The PRESIDING OFFICER. A request for the yeas and nays is pending. Is there a sufficient second? There is a sufficient second.

The yeas and nays were ordered.

The question is on the amendment of the Senator from Missouri. The clerk will call the roll.

Mr. DeCONCINI. Mr. President, I would like to ask the Senator from Kansas and the Senator from Oregon, I thought we had adopted a policy around here to improve the quality of life. I find at 5 minutes to 1, it is not doing much for my life; I do not know about the rest of us. I do not know what the urgency is, why we have to stay up until 3 or 4 in the morning. I understand the process of grinding things out but we have no need to be inhumane to ourselves. It is difficult enough around here, at least for some of us. Why we stay around here all night is beyond me. I suggest we take it up tomorrow or next week.

Mr. CHAFEE. Mr. President, what was the last vote we had? Was that 56 to 39?

The PRESIDING OFFICER. The vote was 40 yeas, 58 nays. The motion to lay on the table was not agreed to.

Mr. CHAFEE. Do we have to go through a rollcall vote? Is it not possible to untangle this because the yeas did not shout loud enough in the last round? I do not believe anything is going to be changed by a rollcall vote.

Mr. BUMPERS addressed the Chair.

The PRESIDING OFFICER. The Senator from Arkansas.

Mr. BUMPERS. Mr. President, I ask unanimous consent that the Senator from Missouri have an opportunity to withdraw his request for the yeas and nays and that the Chair ask for an additional voice vote, after which, if the Chair is still in doubt, the Senator from Missouri be given an additional chance to ask for the yeas and nays.

The PRESIDING OFFICER. Is there objection?

Mr. HARKIN. Mr. President, reserving the right to object, I rise to make an inquiry of the distinguished chairman of the Appropriations Committee. The grants that were in question right now were included in report language in the continuing resolution which was passed, I believe, last December. Would the amendment offered by the Senator from Missouri, if it is carried, strike that report language that included these projects in the continuing resolution for those projects that meet the criteria?

Mr. HATFIELD. The purpose behind putting them in as we did was to give them the force of law as against report language, which is advisory.

Mr. HARKIN. This Senator has discerned that what we have is report language in the continuing resolution that specifically sets out these programs. That still is there. I

assume that this amendment does not take that out.

Mr. HATFIELD. The Senator is correct, the report language is not affected by the amendment offered by the Senator from Missouri.

Mr. HARKIN. So it does not take it out?

Mr. HATFIELD. Yes, the report language remains.

The PRESIDING OFFICER. Is there an objection to the request of the Senator from Arkansas? Without objection, it is so ordered.

Mr. **DANFORTH**. Mr. President, I withdraw my request for the yeas and nays.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Missouri.

The amendment (No. 2021) was agreed to.

Mr. **DANFORTH**. I move to reconsider the vote.

Mr. **PROXMIRE**. I move to lay that motion on the table.

The motion to lay on the table was agreed to.