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Testimony



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**FEDERALLY SPONSORED RESEARCH
Indirect Costs Charged By
Stanford University**

Statement of
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Before the
Subcommittee on Oversight and Investigation
Committee on Energy and Commerce
House of Representatives



Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss our ongoing work looking at how indirect cost, or "overhead" as it is commonly known, is charged to federally sponsored research at universities. So far, our work has been limited to Stanford.

The federal government since World War II has been the key supporter of research activities at universities, and its involvement has been generally viewed as beneficial to the university community as well as to the nation as a whole. Of the \$69 billion in planned spending for federal research and development (R&D) in fiscal year 1991, it is estimated that about \$9.2 billion--or over 13 percent of all federal R&D funding--will be spent on research activities at U.S. colleges and universities. Despite the positive benefits and the generally good relationships that have developed over the years between the government and the university community, there have been some areas of tension and concern, particularly over rising charges for indirect costs.

At Stanford, we have been looking at the kinds of expenditures included in various indirect cost pools and how indirect costs are allocated to federal grants and contracts through application of an indirect cost rate. (See attachment I for a more detailed description of how costs are allocated to federal research.) Our focus has been on selected accounts and transaction detail for fiscal year 1986, the last year audited by the Defense Contract Audit Agency (DCAA). Our purpose was to determine whether or not

costs are accumulated and allocated by Stanford in accordance with the established Office of Management and Budget (OMB) guidelines.

RESULTS IN BRIEF

Overall, we found that serious deficiencies in Stanford's cost allocation and charging practices, combined with inadequate oversight by the Office of Naval Research (ONR) led to significant overcharges to the government. We identified a variety of examples of unallowable and inappropriate costs that Stanford included in its various indirect cost pools charged to federal research in 1986. Although we reviewed only a small portion of the many transactions Stanford processes annually, the examples we found show that the university did not exercise the degree of responsibility one might reasonably have expected, as Stanford officials themselves have recently acknowledged.

The allocation process at Stanford is largely driven by about 90 active Memorandums of Understanding (MOUs), some supported by cost analysis studies or "special studies," between the university and ONR. Some of these MOUs allowed for significant increases in the allocation of indirect costs to federal research without adequate support or review. Our concerns coincide with findings of the Inspector General of the Office of the Chief of Naval Research who recently reported, among other things, that a lack of audit and legal review by ONR and DCAA over these MOUs may have resulted in potentially significant overcharges to the government.

As you know, a number of efforts are underway at Stanford to resolve these concerns. In December, the Chief of Naval Research

appointed a special team of senior legal and contract administration staff to review Stanford's accounting and charging practices and to work closely with DCAA and other concerned government agencies in completing audits and negotiations of incurred costs at Stanford for fiscal years 1981 through 1989. Stanford itself has recognized shortcomings in its accounting system and has recently hired an independent public accounting firm to assess its systems and procedures and appointed a special advisory panel to review and advise on the implementation of improvements identified.

BACKGROUND

Over the past 10 years, through fiscal year 1990, Stanford has received about \$1.8 billion in federal research contracts and grants (excluding funds for the Stanford Linear Accelerator Center)--including about \$605 million to cover indirect costs. To fully appreciate the situation at Stanford, it is necessary to understand the basis upon which university research is funded by the government. Research entails both direct and indirect costs. Direct costs are those that can be specifically identified with a particular sponsored project, instructional activity, or other institutional activity. For example, the direct costs of research are items such as the salaries of the investigators, project-specific research equipment and materials, and the like. On the other hand, indirect costs are those that cannot be identified with a particular project or activity. These would include such costs as utility expenses, depreciation of buildings, and general

university administration costs. The actual indirect cost rate charged for research is roughly the total indirect costs allocated to research, divided by total direct research costs less certain exclusions specified by OMB Circular A-21.

Over the years, a great deal of controversy has centered on the indirect costs associated with federally sponsored research at universities. This is due, in part, to the difficulty in determining what costs should be assigned to research, particularly in a university setting where education and research are so closely intertwined and, in part, to the question of how much of the indirect costs should be borne by the government. Until 1966, federal reimbursement of indirect costs was limited to 20 percent of direct costs. At that time, the limit was removed and by 1990, the average indirect cost rate charged by universities had risen to about 50 percent.

Stanford's indirect cost rate has been consistently among the highest of any university in the country. Its rates rose from 58 percent in fiscal year 1980 to 74 percent in fiscal year 1990-- which means that for every \$100,000 awarded to cover the direct costs of a research project, another \$74,000 is added on for indirect costs. For fiscal year 1991, Stanford originally asked for a rate of 78 percent. However, on the basis of questions raised by a number of investigations currently ongoing at Stanford, including GAO's, ONR set a provisional rate¹ of 72 percent in

¹Provisional rates are negotiated at Stanford for forward pricing or billing purposes subject to later adjustment based on audits of actual incurred costs.

December 1990. This past February, that rate was further reduced to 70 percent.

OMB Circular A-21 establishes the principles for determining costs applicable to grants and contracts with educational institutions. It defines allowable and unallowable costs and discusses indirect cost pools that should be established for accumulating and allocating such costs to research projects. The tests for allowability require that costs be (1) reasonable, (2) allocable to research projects under the A-21 principles and methods, (3) consistently applied, and (4) in conformance with any limitations or exclusions established by the circular or by individually sponsored agreements as to types or amounts of costs. A-21's definition of "reasonableness" includes determining whether or not the cost is of a type generally recognized as necessary for the operation of the institution, and whether or not individuals responsible for incurring those costs acted with due prudence in the circumstances, considering their responsibilities to the institution, the government, and the public at large.

A-21 also allows universities to perform special studies to justify alternatives to the standard A-21 allocation methodologies. A-21 stipulates that such studies, among other things, (1) must be appropriately documented, (2) must distribute costs to the related cost objectives in accordance with the relative benefits derived, (3) must be statistically sound, and (4) must be reviewed at least every 2 years and updated, if necessary. Stanford currently has four such special studies in place.

EXAMPLES OF UNALLOWABLE AND QUESTIONABLE
COSTS CHARGED TO FEDERAL RESEARCH

We identified a number of instances in which costs that are unallowable under A-21 were included in various cost pools, a portion of which was charged to federal research. In addition, we identified other costs which were inappropriate for charging to the government. In the limited time since we started our work, we identified over \$3.6 million in unallowable or inappropriate charges, almost \$1 million of which was erroneously charged to the government. These include:

- Depreciation costs totaling over \$400,000, of which about \$184,000 was charged to the government, for various items of athletic department equipment, including several racing sculls and, primarily, the yacht Victoria.
- Salaries and related administrative expenses, totaling over \$700,000, associated with a shopping center owned and operated by the university, over \$185,000 of which was charged to federal research.

In both of these cases, the costs are clearly unallowable as they directly relate to university auxiliary activities and do not benefit research. In addition, we found a number of other instances of improper charges which are described in attachment II.

Other items we identified as inappropriate for federal reimbursement included charges for cedar closet liners and cabinets, floral arrangements, sterling silverware and other silver items for the President's House, also known as the Hoover House.

Stanford announced in mid-January of this year that it would be withdrawing all the general expenses of the Hoover House, as well two other university-owned residences: the Hanna House (the Provost's residence), and the Lake House (the residence of the Vice-President for Public Affairs). This withdrawal of costs included over \$2.2 million charged to the G&A pool from fiscal years 1981 through 1988, of which the government paid over \$520,000.

These overcharges resulted because Stanford officials did not carry out their roles and responsibilities in a manner to assure only proper costs were passed on to the government. In this regard, the controller's office either did not review, inadequately reviewed or otherwise allowed unallowable costs to be charged improperly to the government. Also, the accounting controls over indirect cost charges related to federally funded research at Stanford are clearly deficient.

QUESTIONS INVOLVING STANFORD'S ALLOCATION
OF COSTS TO FEDERAL RESEARCH

While a selective review of individual transactions can be revealing, it is the allocation process that has the greatest potential for significant overcharges to federal research since it affects all indirect costs. At Stanford, the allocation process is largely driven by various MOUs and special studies, accepted in past years by ONR. Despite the implications these agreements have for higher cost allocations to federal research, however, they have

not been subjected to either audit or legal reviews by the government as required by ONR regulations.

We analyzed several key MOUs and special studies that affect cost allocations. We found that some of them include questionable assumptions, do not provide adequate justifications for the allocation methodologies used, as required by A-21, and generally result in higher allocations of costs to organized research than the standard A-21, or so-called "default method," allows. The Department of Health and Human Services (HHS) and DCAA have recently recommended to ONR that all the MOUs at Stanford be terminated, which the Chief of Naval Research said will be decided by April 1.

The potential cost impact to the government resulting from using the MOUs at Stanford can be illustrated by the MOUs regarding Stanford's methods of calculating and allocating depreciation. For example, based on an MOU proposed by Stanford and accepted by ONR, Stanford uses an accelerated method of depreciation for buildings and improvements rather than the A-21 prescribed straight-line method, even though it has not provided adequate justification for doing so. ONR has now recognized this shortcoming and just recently notified Stanford that it could not continue to use this method without justifying it, even though Stanford had been using it, with ONR's approval, as far back as 1961. By using the accelerated method, Stanford was able to recover \$2.3 million more from the government in depreciation in 1986 than would have been allowed under the straight-line method.

In another example, ONR agreed to allow Stanford to include in its indirect cost pools the direct costs of certain nongovernment grants and contracts that benefit certain general purpose functions such as the libraries. However, A-21 specifies that the determining factor in distinguishing direct from indirect costs is the ability to identify the costs with a sponsored project, not by the nature of the goods and services involved. By charging the expenses under these grants and contracts to indirect cost pools, Stanford receives full reimbursement under its grants or contracts from non-government sources and additional reimbursement from the government through the indirect cost recovery process. Additional examples of other allocation problems can be found in attachment III.

Special Studies

In addition to the above, Stanford has conducted four special studies in other cost areas to justify using alternatives to the A-21 default methods for allocating costs. Stanford used these studies as the basis for various other MOUs, accepted in past years by ONR, affecting cost allocations to federal research. The two studies we reviewed to date--the library study and the utility study--do not conform with A-21 criteria, and thus do not provide Stanford with a valid basis for allocating costs other than by the default method.

Library Study

Stanford's library study is a case in point. Among other things, A-21 specifies that special studies must allocate costs on

the basis of relative benefits derived. However, Stanford allocates most library costs on the basis of "cause and effect". For example, they allocate technical processing costs, which include the costs of the books and preparing the books for use, to all library users except non-Stanford users because they maintain they initially incur the costs for Stanford users only. However, non-Stanford users clearly benefit from the purchase of the books, and therefore should be allocated a portion of these costs. Since costs associated with all users except non-Stanford users are allocated to research, the government pays a higher portion of the library costs than are justified.

To illustrate the potential effect of using the library study, in fiscal year 1988 Stanford allocated library costs of \$12.5 million to organized research using the method contained in the special study. According to Stanford's calculations, under the default method, only \$5.2 million would have gone to organized research, a difference of over \$7 million.

Although ONR announced just last month that it was rejecting the study, the same study has been used, with ONR's approval, for allocating library costs since 1981. Had ONR subjected the study to audit and legal review before approving it, the indirect costs charged to the government might have been lower.

Utility Study

Another special study that has significant impact on how costs at Stanford are allocated to federal research is the utility study. This study, used to allocate the costs of electricity,

natural gas, steam, and chilled water, and the maintenance costs of each utility system, was conducted for Stanford by an outside consultant in 1981 with major revisions in 1982. In our opinion, the utility study also does not comply with A-21 criteria, among other things because it is not "statistically sound." Stanford's study included a selection of 10 buildings that were predominantly used for research, out of 18 buildings that happened to have utility meters, and then projected the results to all 660 buildings on campus, to allocate utility costs that, in 1986, totalled over \$15 million. While the definition of "statistically sound" may be open to interpretation, we do not believe that 10 out of 660 is a statistically sound sample, and particularly since utility usage varies greatly by building, depending upon such factors as age, condition, type of construction, type of heating system, and so forth.

Although Stanford officials stated that an ONR engineer agreed that the sample buildings were representative of the buildings on campus, our discussion with him revealed that he was primarily concerned with ensuring that research space was adequately represented in the sample. However, since, based on the study, utility costs are allocated to research in proportion to allocations to other cost objectives, such as instruction, he should have also ensured that non-research space was adequately represented as well.

Similar to the library study, ONR has also recently rejected the utility study until and unless Stanford can provide

appropriate justification for its use, even though the study has been in use, with ONR's approval, since 1981.

For fiscal year 1988, \$8.8 million in utility costs were allocated to organized research. According to Stanford's calculations, utility costs allocated to organized research under the default method would have been approximately \$4.7 million, a decrease of \$4.1 million for that year.

These allocation examples demonstrate that both Stanford and ONR failed in their responsibilities to protect the proper use of government funds. While Stanford has not demonstrated that their allocation methods are justified, ONR has allowed the university to use such methods for many years without challenge. Had ONR adequately reviewed and challenged these studies when originally proposed, Stanford would have had to either follow the default methods prescribed by A-21 or conducted proper studies to justify any amount more than the default methods allow.

ONGOING EFFORTS AT STANFORD

As a result of all the attention focused on Stanford in recent months, several other inquiries have been launched into various aspects of Stanford's indirect cost recovery practices. One of the first reviews, conducted by the Inspector General (IG) of the Office of the Chief of Naval Research, was concluded last month. While the IG did not examine Stanford's accounting practices, internal controls, or expense vouchers, he did find significant

shortcomings in the ONR's administrative practices at Stanford.

Among other things, he found that ONR

- did not obtain a formal audit or legal review of any of the MOUs or special studies agreed to by ONR between 1980 and 1989;
- did not properly review the special studies every 2 years as required by A-21; and
- improperly excluded HHS from participating in past negotiations, rather than including it as required by OMB Circular A-88.

While the IG concluded that a ONR representative's much publicized estimate of \$200 million in overcharges was judgmental and speculative in nature, he also stated that there appears to be some validity to the representative's concerns that the government has overpaid Stanford for indirect cost from 1980 to 1989. We believe the examples we have provided today lend further credence to the validity of those concerns. Fortunately, there is now a process in place to deal with them.

As you know, in December, the Chief of Naval Research, established a Special University Team, composed of senior ONR headquarters and field staff, to do a number of things. The team is to work closely with DCAA and representatives from other affected agencies to audit incurred costs for 1981 through 1989. More importantly, it will review all MOUs affecting the allocation of costs to the government. That process is continuing. DCAA is supporting that effort and, in response to a request from this

Subcommittee, is also intensifying its tests of individual transactions and vouchers.

In addition, Stanford itself has recognized shortcomings in its accounting system and in January announced a three-step approach to deal with these issues. The first step was to withdraw all G&A costs involving the Hoover House, Hanna House, and the Lake House, which I mentioned earlier. The second step was to hire a public accounting firm to independently assess Stanford's systems and procedures and to recommend appropriate improvements. The third step was to appoint a special advisory panel to review and advise on the implementation of improvements recommended in Stanford's accounting system and other matters related to accountability for federally sponsored research.

We believe the initiatives that are being taken, both by the government and Stanford, are positive and appropriate steps that must be taken to bring the problems identified under control. We would be pleased to work with these entities to assist in resolving the problems at Stanford. However, we believe we now need to look beyond Stanford to determine whether the problems identified at Stanford also exist at other universities and, if so, what can and should be done to protect the government's interest. Among other things, such a determination may call for changes to OMB Circular A-21 that might be needed and an examination of the government's approach for reimbursing indirect costs at universities.

This concludes my statement, Mr. Chairman. I would be glad to answer any questions.

HOW INDIRECT COSTS ARE ACCUMULATED AND ALLOCATED
TO FEDERALLY SPONSORED RESEARCH

Indirect costs--such as administrative expenses, utility and maintenance expenses, and depreciation--are costs that are not readily and specifically identifiable with a particular sponsored project, an instructional activity, or any other institutional activity. These indirect costs are distributed among various direct cost objectives, such as instruction and "organized" or sponsored research (which at Stanford is primarily federal research but also includes non-federal research), and other institutional activities which represent the major functions of the university.

At universities, such common costs are normally accumulated in seven indirect cost categories, or "pools," including

- depreciation and use allowances,
- operation and maintenance expenses,
- general administration and general expenses,
- departmental administration expenses,
- sponsored projects administration expenses,
- student services administration expenses, and
- library expenses.

Some of the indirect cost pools are further broken down into several cost groups within that pool. Before indirect costs are assigned to a particular cost pool or cost group, however, they

must first be reviewed to determine if some or all of the costs might be unallowable under A-21 criteria. Such costs are to be removed from the accounts so that only the allowable costs in each account are to be charged to each pool. The allowable costs are then assigned to the appropriate indirect cost pool for allocation to cost objectives, such as organized research, on the basis of formulas that are consistent with the benefits received or other equitable relationships. The basis for allocating each pool varies but is generally based on what are known as "modified total direct costs" (MTDC) for each cost objective to which costs are to be allocated.² For some pools, other bases are used, depending on what A-21 requires or what the university determines to be a fair basis for allocation. Thus a portion of each pool is allocated to each cost objective, as appropriate, including to organized research.

After all costs have been allocated to the relevant cost objectives, the total costs allocated to organized research are used to determine the indirect cost rate. The actual rate is roughly the total indirect costs allocated to organized research divided by the MTDC base for organized research. The total cost allocated to organized research times the federal participation

²MTDCs include salaries and wages, fringe benefits, materials and supplies, services, travel, and the amount of any subgrants and subcontracts up to \$25,000 each. MTDC specifically excludes, among other things, purchased equipment and the amount of subgrants and subcontracts over \$25,000 each.

ATTACHMENT I

ATTACHMENT I

rate in organized research, equals the total indirect costs to be paid for by the government for federally sponsored research.

EXAMPLES OF UNALLOWABLE COSTS CHARGED
BY STANFORD TO FEDERAL RESEARCH

Our examination of selected accounts and transaction detail identified the following instances in which costs were erroneously charged to the government:

- Athletic Equipment. Stanford erroneously charged \$184,286 in depreciation costs to the government from 1981 to 1988 for numerous items of athletic department equipment, including outboard motors, racing sculls and, primarily, the 72-foot yacht, Victoria. Stanford officials initially assured us that none of the costs for their sailing program or the yacht were charged to the government. However, when we requested documentation for the actual yacht purchase, they discovered that depreciation costs for the yacht, as well as for the other equipment, had erroneously been included in the equipment depreciation pool charged to federal research. These charges had been occurring for at least 10 years, and while the costs did not become significant until the Victoria was purchased, certainly there was a breakdown in accounting and internal controls that allowed these charges to continue undetected for so long.

The Victoria was actually purchased in fiscal year 1988 under what Stanford officials call their "boat donation program."

Under this program, Stanford pays a price well below market and the seller "donates" the remaining value. The university paid only \$100,000 for the Victoria, which was appraised at \$1.2 million. Since the yacht was recorded at its appraised value, Stanford had already recorded depreciation of \$120,000 the year it was purchased, of which the government paid about \$50,000, despite the fact that it paid only \$100,000 for the boat itself. The boat has been on the sales market for many months, currently at a price of \$475,000.

-- Shopping Center Administration. The Stanford Shopping Center is an open air mall with several flagship department stores. It is owned and operated by the university, and thus Stanford pays for the administration of the center including administrative salaries and related expenses. These expenses were properly eliminated from the General and Administrative (G&A) cost pool in fiscal year 1985, but erroneously remained in the pool in fiscal years 1986 and 1987. Although the expenses were properly eliminated in fiscal year 1988, the university never corrected the 1986 and 1987 charges. As a result, a total of \$707,737 in shopping center costs was added to the G&A pool for those years, of which the government paid \$185,872. While such errors highlight a breakdown in accounting control, of greater concern is the failure on Stanford's part to correct those earlier years once the error was discovered. Stanford officials agree that these charges

were erroneously left in the G&A pools in 1986 and 1987 and have agreed to make adjustment to the government. However, they were unable to explain why corrections were not made to those years once the error was discovered in 1988.

- Public Relations. OMB Circular A-21 specifically disallows costs incurred for public relations activities, yet Stanford included \$7,198 in the G&A pool for producing the Community Report, a semi-annual booklet that was sent to homes in nearby communities to promote university activities. The university also charged \$2,164 in travel expenses for a member of Stanford's Public Affairs office who went to Paris for an alumni conference on "public relations, press coverage and news coverage." In addition to disallowing public relations costs, A-21 also disallows alumni activities and specifies that foreign travel costs for any purpose are allowable only when the travel has received specific prior approval, which Stanford did not request nor obtain from the cognizant agency. Although this example violated several A-21 provisions, the item remained in the G&A pool. For these two items, the government paid \$2,449. Stanford officials agreed these items should have been eliminated from the G&A pool.
- Advertising Costs. A-21 specifically states that the only advertising costs allowed are those necessary to meet the requirements of a sponsored agreement, such as recruiting personnel, procuring goods and services, and disposing of

surplus materials. We determined that Stanford included \$2,733 in the G&A pool for advertisements to promote student attendance at the summer session. The university also spent \$2,274 for numerous advertisements on career week for students and career placement office services, and \$905 to advertise positions for operating an investment fund, both of which were charged to the Student Services pool. Not only is such advertising prohibited, but A-21 also specifically disallows any costs of investment counsel and staff and similar expenses incurred for investments. For these items, the government paid \$1,296. Stanford officials agreed that all three charges were improper.

-- Entertainment Costs. Stanford and ONR worked out an MOU in 1979 that allows Stanford to deduct a flat 20 percent of all subsistence costs in the G&A and Departmental Administration pools. The 20-percent deduction represents unallowable entertainment charges, which eliminates the need to track and eliminate specific charges. However, we identified several examples in which subsistence costs were not charged to subsistence accounts and thus were not reduced by 20 percent. For example, Stanford charged over \$2,000 for alcoholic beverages for the Lake House (the university-owned residence of the Vice President of Public Affairs) which were not charged to subsistence, resulting in the total costs staying in the G&A pool. In addition, we found costs for an office

picnic, a shower, and a party that likewise were not charged to subsistence and therefore, were included in full in the G&A pool. Had these been properly recorded, an additional \$480 would have been eliminated from the G&A pool. Stanford officials disagreed that the costs for the picnic, shower, and party mentioned above were unallowable entertainment.

Instead, they believed they were allowable employee morale, health and welfare costs under A-21. However, they agreed that all of the above items should have been charged to subsistence, and thus they should have deducted 20 percent.

-- Fundraising Activities. A-21 states that costs of organized fund raising, including financial campaigns, endowment drives, solicitation of gifts and bequests, and similar expenses incurred solely to raise capital or obtain contributions are unallowable. However, charges to the G&A pool included \$2,012 for a donor recognition luncheon at the President's house, and \$1,228 to the library pool for a staff member to travel to meetings with potential corporate donors. Stanford agreed these charges, for which the government paid \$834, should have been eliminated.

In addition, we reviewed various fundraising transactions included in Office of Development accounts, including thousands of dollars in expenses incurred for various fundraising dinners, travel costs for visiting prospective donors.

and publication costs for various fund-raising booklets. While Stanford excluded various percentages from these accounts to represent unallowable costs, we found they did not have adequate documentation to support their calculations. For example, Stanford excluded 82 percent of the Office of Development's School Support account from the G&A pool as unallowable costs. However, the university has not been able to substantiate which specific costs were taken out and which costs were left in; thus, whether the 18 percent of costs, which totalled \$328,354, that remained in the pool was allowable is unknown. In addition, another one of the Office of Development's accounts specified for elimination in full from the G&A pool was only 82 percent eliminated. The remaining 18 percent, equating to \$10,900, erroneously remained in the pool. As a result, the government paid an additional \$2,851 for this account.

-- Student Activities. While A-21 allows certain student services, such as admissions, registrar, counseling, and placement activities, to be charged to the student services cost pool, it specifically disallows intramural activities, student publications, student clubs, and other student activities. However, we discovered that Stanford charged to the pool the full costs of several student activity-related accounts, such as the Fraternity Task Force, totalling \$68,324, of which the government paid \$12,489.

We also reviewed several transactions in other student services accounts such as "freshman orientation." We identified costs of \$589 for movie rentals, \$875 for two bands for a student dance and a performance, \$1,740 for soft drinks and rental of several sound systems, and \$2,310 to rent vans for hauling student luggage. In other accounts, we also found such charges as \$2,350 for airport shuttles, \$900 for a chartered tour of San Francisco and a "beach trip," and \$2,538 for furniture for student clubs. As a result of these charges, the government paid \$2,072.

Stanford officials disagreed that the orientation accounts mentioned above are unallowable. They stated that their student orientation costs are part of a program to orient students to the campus and improve their retention. However, we believe the examples cited are not appropriate charges to the government.

-- Other Costs. In reviewing the Operations and Maintenance pool, we came across some costs that do not appear allocable and should have been disallowed from the pool. For example, we discovered that the O&M costs of the Chancellor's residence--a residence not owned by the university--are still being charged to the pool even though the Chancellor retired in 1968 and died in 1985. From 1986 to 1990, these costs

amounted to \$218,230, of which the government paid about \$63,931. Because the residence no longer serves in an official capacity, does not benefit research, and is not necessary for the operation of the university, none of the costs should be allocated to research. Stanford officials stated they believe such costs are appropriate, since the agreement was entered into while the chancellor was alive and thus represents an employee benefit.

EXAMPLES CONCERNING STANFORD'S
ALLOCATION OF COSTS TO FEDERAL RESEARCH

Additional allocation problems we found which resulted in higher allocations of costs to organized research than the default method, yet without adequate justification include:

- Operation and Maintenance (O&M) Costs. Stanford conducts an annual space inventory to determine the functional use of each room in each building. It then categorizes all space on campus as either academic space or auxiliary space. Academic space is that used for academic functions such as instruction, research, libraries, etc. Auxiliary space is space used for nonacademic, or auxiliary, functions such as food and housing facilities, the bookstore, and the student union. Some O&M costs, such as general campus O&M costs, are allocated to academic space only. While Stanford, on the basis of an MOU accepted by ONR, excludes costs associated with auxiliary functions from the allocations and charges them directly to the auxiliaries, we found that they narrowly define costs associated with the auxiliaries and thus eliminate relatively few costs. For example, Stanford has numerous roads that run throughout the campus. In allocating the costs associated with maintaining these roads, only those costs relating to the relatively few roads that run directly in front of or to an auxiliary function, such as a dorm, are

charged to the auxiliaries. The vast majority of roads that serve the entire campus are assigned only to the academic space, which thereby results in a higher allocation of costs to organized research. In 1986, \$4 million in general campus O&M costs were allocated to organized research, of which the government paid \$3.4 million.

- Capital Improvement Depreciation. Stanford also uses the space inventory to allocate depreciation costs of capital improvements, such as outdoor lighting, parking lots, and general campus landscaping. In 1986, such charges to organized research totalled over \$700,000. A-21 requires that such costs be allocated to user categories of students and employees on a full-time equivalent basis, with a further allocation based on the proportion of salaries and wages of employees in the various functions. Stanford, however, has an MOU, accepted by ONR, which allows it to allocate these costs to academic space on the basis of the space inventory without adequate justification. As a result, because a portion of these costs are allocated only to the academic functions, a higher share of them is being allocated to organized research, thus to the government.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our review was performed in response to a September 7, 1990, request from the Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, to examine how universities charge and allocate indirect costs to federally sponsored research grants and contracts. At their request, we began our work at Stanford University. Our objectives included determining the types of costs that go into the indirect cost pools and examining Stanford's methods of allocating these cost pools to organized research to assess how the indirect cost rates are determined. In doing so, we also sought to determine whether adequate internal controls were in place to ensure that only appropriate costs are charged and allocated to the government. We also looked at the oversight provided by the Office of Naval Research (ONR), the cognizant agency responsible for negotiating the indirect cost rates with Stanford.

To accomplish our objectives, we met with Stanford officials to obtain an understanding of their accounting and allocation systems. We also met with ONR and Defense Contract Audit Agency (DCAA) officials to obtain their input on Stanford's procedures and to determine their roles in the audit and negotiation process. We met with Office of Management and Budget (OMB) officials to obtain additional background and perspective on the intent and substance of A-21 and other criteria. We also met with officials

at the Department of Health and Human Services (HHS), which is the cognizant agency responsible for negotiating indirect cost rates at most of the colleges and universities in the country, and with officials from the Association of American Universities (AAU), which issued a 1988 report on its evaluation of the A-21 indirect cost system, to obtain additional background on the history of federally sponsored research at universities, and to obtain a perspective on the indirect cost processes at other universities.

As negotiations with Stanford are still open for fiscal years 1981 to the present, we focused our review on fiscal year 1986, the last year audited by DCAA, in order to take advantage of DCAA's experience and findings. Where problems in specific areas were found, we also reviewed those areas in the other years as well. We judgmentally selected for review 74 accounts from four of the indirect cost pools on the basis of the materiality of the accounts or because, based upon A-21 criteria, such accounts appeared warranted to review. From these accounts, we selected and reviewed 219 transactions in light of A-21 requirements, supplemented by discussions with Stanford officials on each item.

As the costs charged to the various direct cost objectives, including organized research, are influenced more by the methods of allocation than by individual transactions, we also reviewed Stanford's allocation methodologies for charging costs to organized research, placing particular emphasis on the depreciation and operations and maintenance (O&M) cost pools. As the

allocations are heavily influenced by Stanford's 90 MOUs and special studies, we reviewed the current special studies and selected MOUs against A-21 requirements in conjunction with our review of the cost pools. We also reviewed Stanford's compliance with these MOUs and special studies.

We have also considered the results and implications of other inquiries at Stanford, including the recently released report by the Inspector General of the Office of the Chief of Naval Research. We met with the Chief of Naval Research and with the ONR special team to determine the status of their ongoing work at Stanford. We met with DCAA officials to determine the status and approach of their audits at Stanford as well as preliminary results. We also discussed with Stanford officials the status of the review initiated by Stanford which is being conducted by a public accounting firm.