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HOUSE - Science & Astronautics
AWARDS OF FELLOWSHIPS AND SCHOLARSHIPS UNDER
THE NATIONAL SCIENCE FOUNDATION ACT

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HEARINGS
BEFORE THE
COMMITTEE ON
SCIENCE AND ASTRONAUTICS
U.S. HOUSE OF REPRESENTATIVES
EIGHTY-SEVENTH CONGRESS
FIRST SESSION
ON
H.R. 7806
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JUNE 15, 16, JULY 20, 21, AND AUGUST 15, 1961

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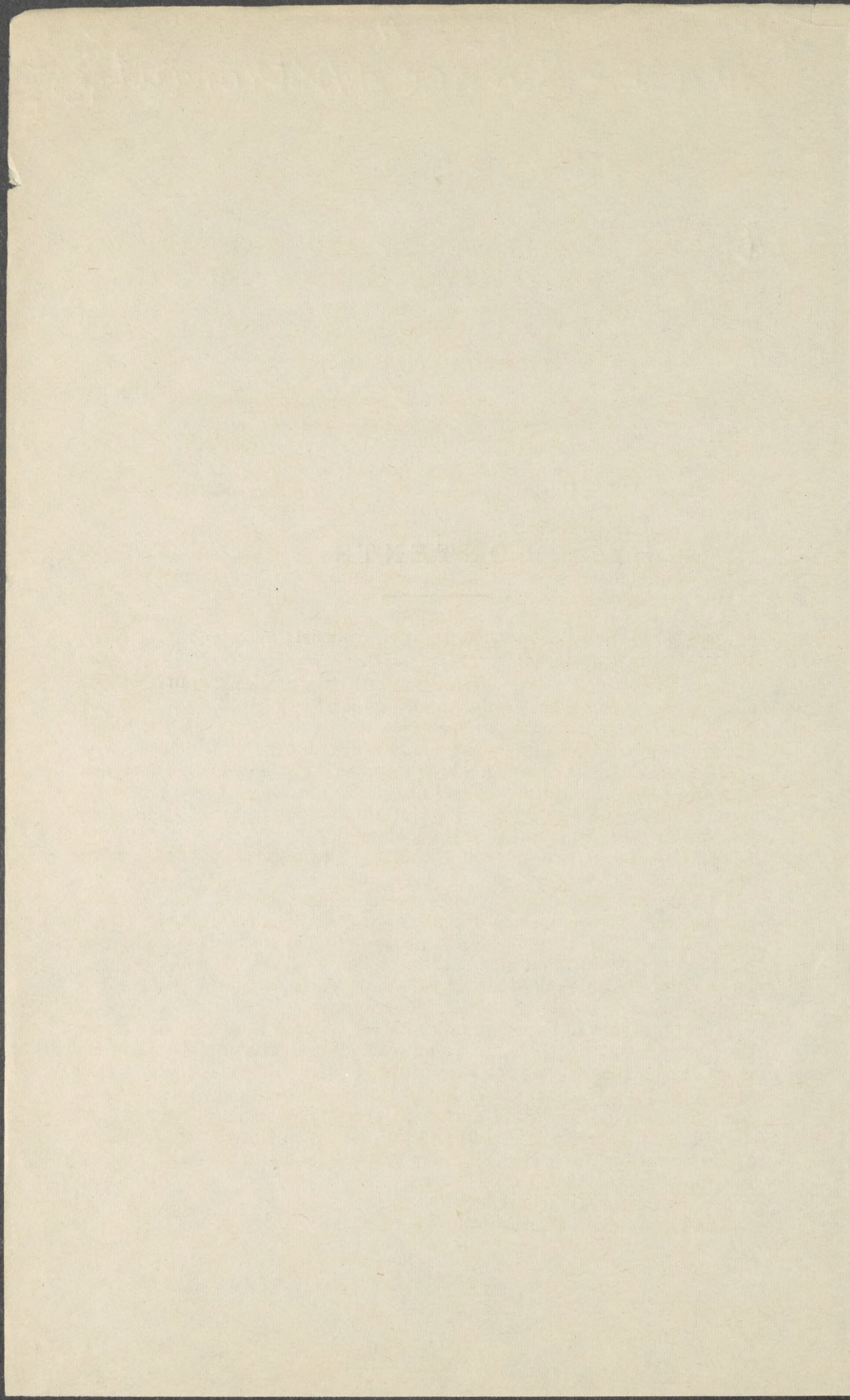
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AWARDS OF FELLOWSHIPS AND SCHOLARSHIPS UNDER THE NATIONAL SCIENCE FOUNDATION ACT

THURSDAY, JUNE 15, 1961

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE AND ASTRONAUTICS,
Washington, D.C.

The committee met at 10:20 a.m., pursuant to notice, in room 214-B, New House Office Building, Hon. Overton Brooks, chairman, presiding.

The CHAIRMAN. The committee will come to order.

Before we proceed with the business of the day, Captain Silberstein, would you present to us the new committee staff member?

Mr. SILBERSTEIN. Mr. Chairman, it would be a great pleasure to introduce Col. Earl G. Peacock, U.S. Army Corps of Engineers, who is coming to us directly from the Office of the Director of Defense Research and Engineering.

Colonel Peacock is very familiar with the research and development programs of the Department of Defense, and also those of NASA, since he came out of the office where they work on the range and instrumentation for the national missile ranges.

Of course, this is also NASA's province. I know Colonel Peacock is going to do a magnificent job for the committee. I know him by reputation in the Pentagon. He is highly respected by all three services, and by the Department of the Defense.

The CHAIRMAN. Thank you, Captain. I appreciate your statement very much.

I might say for the benefit of the members, Colonel Peacock continues as an officer on active duty with the Office of Chief of Engineers of the U.S. Army. He is on loan to the committee under the usual arrangement that the committee has with the Defense Department whereby able outstanding officers serve for a limited time, a period of 1 year to be specific, with the committee.

It is a pleasure to have you on the staff, Colonel Peacock. We know that you are going to be of great assistance to the committee in its work in the future. At the same time, I want to say, truly and earnestly for myself, that in welcoming Colonel Peacock from the Army, we realize it means that Captain Silberstein, who has been with us almost a full year, will be returning to the U.S. Navy. He has done an outstanding job. He has made many friends on the Hill, and we reluctantly return him to the Navy.

Mr. FULTON. Mr. Chairman.

The CHAIRMAN. Mr. Fulton.

Mr. FULTON. I would suggest a resolution be prepared under the sponsorship of the entire membership of the committee, for Captain Silberstein, thanking him for his service, warm friendship, and efficiency, and the resolution should have the usual frills put on it by somebody, to be presented to him in printed form, and then ask that this resolution be put on his personnel records.

Mr. ANFUSO. I would like to second that.

The CHAIRMAN. I yielded to Mr. Fulton, feeling that that was what he had in mind.

Mr. FULTON. Being an unbiased Navy officer, I think he did a good job.

Mr. MILLER. As a biased Army man, I want to take this opportunity to subscribe to everything done by Navy men.

The CHAIRMAN. Mr. McCormack.

Mr. McCORMACK. I think it is very nice and proper that we manifest clearly and publicly our appreciation to Captain Silberstein for the remarkable contributions he has made in the work of this committee during his period of assignment here.

He has made a profound impression upon me and upon all the members of the committee. It is a wonderful thing to see men like him, and Colonel Peacock, and others dedicating their whole lives to the military service of our country. The very existence and preservation of our country is involved.

Captain Silberstein has made a distinctive and pronounced impression on all of the committee in connection with the outstanding contributions he has made.

Flattery of course is a form of insult; a compliment on the other hand is something that should be given and this is meant to be entirely complimentary to Captain Silberstein. I know the Defense Department as a whole is justifiably proud of his services here particularly the Department of the Navy. I want the Secretary of the Navy and the Navy Department in general to know the very high regard we have for Captain Silberstein and the powerful contributions he made to the work of this committee while he was here, and how much we personally wish him future success particularly in the way of promotion.

We welcome Colonel Peacock and we know his work and association with us will be in accord with the high level Captain Silberstein established.

I join with the chairman and Mr. Fulton in everything they said. I think it would be most proper if the committee at the right time take formal action along the lines outlined by Mr. Fulton.

The CHAIRMAN. If there is no objection, and I am sure there is none, the motion, duly seconded, will stand adopted unanimously.

I will designate Mr. Ducander to have the staff draft an appropriate resolution for the committee to formally approve at an appropriate time.

I might add one more word. I think Captain Silberstein has given us many very able documents that he has worked on and formulated. I think one of the finest that has yet been presented is his recent staff study on Project Mercury, which is just now in the hands of the committee.

After the committee has had a chance to study the matter, if the committee so desires, we may formally make it a committee document. Mr. Anfuso?

Mr. ANFUSO. Mr. Chairman, I am very happy to join with my colleagues of this committee in paying a well-deserved tribute to Capt. Howard J. Silberstein for the excellent job he has done.

Captain Silberstein came to our committee just about a year ago on loan from the Navy Department as a staff consultant on technical matters dealing with science and astronautics. In the course of this year he has written several very fine reports on various aspects of the space program, he has assisted the committee at hearings on numerous occasions, and he has been most helpful to individual members with information and advice in connection with our committee work.

I have found him to be particularly cooperative in every way and on every occasion when I consulted him. He willingly gave of his time, his effort, and his great store of knowledge on the subject.

May I take this occasion, Mr. Chairman, to emphasize the great need for dedicated scientists in Government service, such as is exemplified by Captain Silberstein, who are sacrificing more remunerative opportunities in private industry in order to devote themselves to this type of service in the best interests of the American people. If we had more dedicated men like that, I am certain our space program and our scientific progress would be much further advanced today than it actually is.

I want to express my sincere appreciation to Captain Silberstein for the wonderful cooperation he has given us, and I want to wish him much success in his future endeavors. Perhaps some day soon he will attain the rank of admiral, and we shall all be very proud of his achievements.

The CHAIRMAN. Any statements which any members wish to present within the next 3 days to the committee will be accepted by the staff of the committee and inserted in the record.

If there is no objection, we will turn to the regular business of the committee.

I want to start by informing the members of the committee that the chairman's attention has been called to the handling of fellowship awards by the National Science Foundation. One particular fellowship was given to a student at the University of Illinois, and with respect to that case, my attention was called to the fact that the person receiving this fellowship had appeared before the Un-American Activities Committee of the House of Representatives in regular course, and had refused to answer questions propounded by the Un-American Activities Committee of the House. In due course, he was cited by the House for contempt and later tried and convicted by a competent U.S. court. On appeal, the conviction was affirmed, and then following that, it is our understanding that a fellowship was awarded to him by the National Science Foundation.

Of course, this committee knows of the interest of the Un-American Activities Committee in this matter. In the first place, the young man in question, the recipient of the fellowship, had appeared before the Un-American Activities Committee and refused to answer questions.

Of course, the Un-American Activities Committee followed the matter through and presented it to the House of Representatives.

Later the matter was turned over to the proper U.S. attorney for handling. The committee has taken all that into consideration.

At the same time, this committee has a responsibility in reference to the legislation covering the award of scholarships and fellowships under the National Science Foundation Act.

When reference was made to this incident in the Congressional Record, several members of the committee took the matter up with the chairman, and I authorized the committee staff to proceed to investigate this matter, and to find out what laws cover the award of fellowships and scholarships by the National Science Foundation; to determine whether or not they had been complied with, and what restrictions are placed upon the award of scholarships. I wanted the staff's recommendations, following this study, as to the need for changes to be made in the law, so as to strengthen the law, or to provide for appropriate administrative discretion.

The staff has reported to me, and I authorize the calling of this committee meeting this morning, and we announced it to the press.

This morning I learned that the Un-American Activities Committee also has called a meeting for this morning. Their meeting was called for 9:30. Our meeting was called for 10 o'clock. I think some of our witnesses are at the Un-American Activities Committee meeting now.

Dr. Waterman called me this morning and said he had been subpoenaed for that particular purpose, and I told him we would stand aside, and that he should go ahead and respond to the subpoena; when he finished there, he should come here and we would take up his case.

Dr. Waterman hasn't come yet. Is Mr. William J. Hoff, General Counsel, here?

Is Mr. Charles B. Ruttenberg, Deputy General Counsel, here?

Mr. Thomas D. Fontaine, Fellowships Section; is he here?

Mr. FONTAINE. Yes.

The CHAIRMAN. Have you any word, Mr. Fontaine, from the other witnesses?

Mr. FONTAINE. Mr. Chairman, only to confirm what you have already stated. When I arrived here, I received a note from your office staff that I was to call the National Science Foundation, at which time I was informed that the other three parties mentioned were meeting with the House Un-American Activities Committee.

The CHAIRMAN. Thank you, sir.

Clearly, there is no conflict between the two committees in jurisdiction. The Un-American Activities naturally has jurisdiction over subversive activities and un-American acts.

On the other hand, this committee clearly has legislative jurisdiction over changes or amendments to the National Science Foundation Act, so I can't see any clash at all in jurisdiction between the committees.

My thought is this: That we recess until about 11:15. At that time, if Dr. Waterman and Mr. Hoff, and Mr. Ruttenberg have been released from the Un-American Activities Committee, we can probe into this matter at that time. If they have not been released by then, we can adjourn and meet tomorrow morning, or some other time that will be satisfactory with them.

Mr. Fulton, did you have a statement?

Mr. FULTON. Yes, I have a preliminary statement.

I would ask unanimous consent to put in the record at this point the letter of Mr. Roudebush, who brought this question up.

The CHAIRMAN. Frankly, if we are going to hold hearings, we ought to really open them before we do anything else. If you start putting in evidence——

Mr. FULTON. This is not evidence. I want to have the record show why we are here.

The CHAIRMAN. The letter was written to me. I think I am the one that ought to present it to the committee, and I would rather do it in the regular course.

Mr. FULTON. I am not quite through.

The other point is this: According to your statement, this committee has responsibility in this matter. I would like the counsel of the committee to read the statutory provisions which provide responsibility of this committee. Please read that.

The CHAIRMAN. Isn't that also a part of the hearing?

Mr. FULTON. I would like to know why we are here.

Many times I have tried to get authority in this committee to make annual authorizations of appropriated funds for the National Science Foundation, and other agencies.

We do not now have an annual authorization responsibility.

The CHAIRMAN. The authorization act was passed in 1950, for the appropriation of funds, without coming back to this committee year after year.

Mr. FULTON. I would like it pointed out right in the record at this point, that the Science and Astronautics Committee has no authority for annual authorizations, and that this authority resides solely in the House Appropriations Committee as far as the House is concerned, and I would like for counsel to comment on that.

The CHAIRMAN. Do you want to read that law, Mr. Hammill?

Mr. FULTON. Actually what we are doing is assuming new specific jurisdiction and if I have anything to do with it, I am certainly going to ask to see the statutory authority for each case from here on.

The CHAIRMAN. I don't think it is assuming new jurisdiction. I think the committee has always had jurisdiction.

Mr. FULTON. Not on supervision of the spending of funds.

The CHAIRMAN. Before the organization of this committee, a general act was passed by the Congress which grants to the Appropriations Committee the authority to appropriate funds from year to year without the necessity of departments and agencies coming back to the committees for authorization.

Mr. HAMMILL. This is true, but our responsibilities in connection with these hearings stem from the rules of the House. Under the rules of the House, this committee has legislative oversight of the activities of the National Science Foundation.

Mr. FULTON. Would you read the provision to me, and then read the provision on the authorization of the National Science Foundation showing a general authorization so that all they have to do is go before the House Appropriations Committee. I would like those two things read, if you please.

Mr. ANFUSO. Would the gentleman yield to me for a minute?

Mr. FULTON. Yes.

Mr. ANFUSO. I think all the gentleman is trying to do is establish appropriate jurisdiction. The gentleman is not trying to raise any objection to our hearings on this matter, but wants to see that we have adequate authority.

Mr. FULTON. And to show what our previous responsibility has been—that it hasn't been on individual scholarships.

The CHAIRMAN. I think the gentleman is proceeding along the same line of thought that we all are.

Mr. FULTON. We are not disputing; we are getting the facts.

The CHAIRMAN. If this committee has responsibility, we want to discharge that responsibility, isn't that correct?

Mr. FULTON. That is correct. I want to get it on the record.

Mr. HAMMILL. Section 17 of Rule XI of the House of Representatives deals with the powers and duties of the Committee on Science and Astronautics. That rule provides that all proposed legislation, messages, petitions, memorials, and other matters relating to the following subjects shall be referred to the Committee on Science and Astronautics: (a) Astronautical research and development, including resources, personnel, equipment, and facilities; (b) Bureau of Standards, standardization of weights and measures, and the metric system; (c) National Aeronautics and Space Administration; (d) National Aeronautics and Space Council; (e) National Science Foundation; (f) Outer space, including exploration and control thereof; (g) science scholarships; (h) scientific research and development."

It appears that this committee has jurisdiction over the matter before it today on the basis of both subsection (e), National Science Foundation, and subsection (g), science scholarships.

The CHAIRMAN. What about the law which was passed, I think in 1950, which covers the appropriation of funds for scholarships?

Mr. FULTON. That is setting up the National Science Foundation. I believe it is the general enabling act.

Mr. HAMMILL. Section 16 (d) of the National Science Foundation Act of 1950 reads as follows:

No part of any funds appropriated or otherwise made available for expenditure by the Foundation under authority of this act shall be used to make payments under any scholarship or fellowship to any individual unless such individual, (1) has executed and filed with the Foundation an affidavit that he does not believe in, and is not a member of and does not support any organization that believes in or teaches, the overthrow of the United States Government by force or violence or by any illegal or unconstitutional methods, and (2) has taken and subscribed to an oath or affirmation in the following form: "I do solemnly swear (or affirm) that I will bear true faith and allegiance to the United States of America, and will support and defend the Constitution and laws of the United States against all its enemies, foreign and domestic." The provisions of section 1001, of title 18, United States Code, shall be applicable with respect to such affidavits.

Section 1001 of title 18, United States Code, prohibits the execution of false affidavits, knowingly and willfully, or otherwise furnishing false information to any department or agency of the United States. Violation carries a penalty of not more than \$10,000 fine or 5 years in prison, or both.

Mr. FULTON. Might I ask the member of the National Science Foundation who is here, who discussed this with the members of the committee, will you produce for us those documents signed by Mr. Yellin? Are they here? These documents he is supposed to have signed under the law, will you produce them?

The CHAIRMAN. Just a minute.

I think we ought not to introduce evidence before we get into the hearing.

Mr. FULTON. I would like to have them ahead of time to study them.

The CHAIRMAN. You can study them. You will have an opportunity to study all of those things.

Mr. FULTON. Why can't we have them ahead of time, and let counsel see them ahead of time?

The CHAIRMAN. Well, we get into the question of evidence, and I think we ought to hear Dr. Waterman first. I think we ought to proceed in an orderly manner.

Mr. BELL. Mr. Chairman, may I say something relative to Mr. Fulton's statements?

The CHAIRMAN. Yes.

Mr. BELL. I believe Mr. Fulton's point is well taken, Mr. Chairman. It is my understanding that under this program of National Science Foundation fellowships there is a restriction in allowing us to have such documents. Unless we get this cleared in advance, we are not going to know enough to question the witnesses intelligently.

The CHAIRMAN. You would ask Mr. Fontaine, who is not in an authoritative position, as Director of the National Science Foundation would be, to do something that is really the prerogative of Dr. Waterman.

Mr. FULTON. May I comment there? We have the authority of the President who has said that all these agencies are to disclose anything that is not classified in the interest of national security. This is the open time; we are going to be very open with all these things, rather than keep them secret.

The CHAIRMAN. We are not trying to keep them secret.

Mr. FULTON. I want them presented to counsel ahead of time. That is what I am aiming for.

The CHAIRMAN. Let me tell you this. The gentleman also has suggested that we should subpoena the witnesses. I don't think the witnesses are holding back. I think the witnesses are doing their level best to be here. If it is a matter of secrecy, then I think we can proceed in a different way.

Mr. FULTON. I thought this was the New Frontier, when we were going to bring all these things up, spread them on the table.

Mr. RYAN. I second the motion.

The CHAIRMAN. You heard the motion we recess until 11:15. Any objection?

Mr. FULTON. I ask for a rollcall on that, please.

Mr. BELL. I second the motion.

Mr. FULTON. I want to get the preliminary basis for these hearings.

The CHAIRMAN. Will the clerk call the roll? We are voting on the motion to recess until 11:15.

The CHAIRMAN. Aye.

Mr. MILLER. Aye.

Mr. FULTON. No.

Mr. ANFUSO. Aye.

Mr. VAN PELT. Aye.

Mr. KARTH. Aye.

Mr. HECHLER. Aye.

Mr. RIEHLMAN. Aye.

Mrs. WEIS. Aye.

Mr. MOELLER. Aye.

Mr. MOSHER. Aye.

Mr. ROUDEBUSH. No.

Mr. BELL. No.

Mr. CASEY. Aye.

Mr. RANDALL. Aye.

Mr. RYAN. Aye.

Mr. CORMAN. Aye.

Mr. McCORMACK. Aye.

Mr. FINCH. Mr. Chairman, on this vote, 15 vote aye, 3 vote no.

The CHAIRMAN. How many ayes?

Mr. FINCH. 15.

The CHAIRMAN. 15 ayes, 3 noes. The committee will stand recessed until 11:15.

(Whereupon, at 10:45, the committee recessed until 11:25 a.m.)

The CHAIRMAN. The committee will come to order.

Our witnesses haven't arrived yet. A good many members of the committee will be out of town tomorrow and therefore we will recess this committee meeting until 2 o'clock this afternoon.

Mr. MOELLER. I so move, Mr. Chairman.

Mr. BELL. Second.

The CHAIRMAN. No objection. It is so ordered. We will meet at 2 o'clock.

(Whereupon, at 11:27 a.m., the committee recessed to reconvene at 2 p.m. of the same day.)

AFTERNOON SESSION

The CHAIRMAN. The committee will come to order.

This morning we met at 10 o'clock and then we recessed until 11:25 awaiting the appearance of our witnesses. Another committee of Congress had called the same witnesses.

Now we are pleased to have Dr. Alan T. Waterman, Director of the National Science Foundation, Mr. William J. Hoff, General Counsel of the National Science Foundation, Mr. Charles B. Ruttenberg, Deputy General Counsel of the National Science Foundation, and Mr. Thomas D. Fontaine, who, by the way, was with us this morning.

We are glad to have you gentlemen here before the committee.

I think at the outset we should say that this hearing was called in response to a statement which I saw in the Congressional Record a number of days ago regarding the case of a young man named Yellin, from Indiana, I believe, who is the recipient of a fellowship from the National Science Foundation.

Now, according to this statement, he had a record of difficulty with the Un-American Activities Committee, following which he was tried and convicted of contempt of Congress. He appealed, and the sentence was affirmed by the Federal court of appeals. He was given a sentence of 1 year imprisonment.

Recently, I received some letters from a member of this committee, Mr. Roudebush of Indiana, who was personally familiar with the case.

I responded immediately to his inquiry and his suggestion regarding hearings on the matter.

Following that, I received a letter from Mr. Hechler, also a member of the committee from West Virginia. I replied to him that the counsel for the committee is already working on the matter and that we hoped to have open hearings soon on this matter.

If there is no objection at this point I would like to place into the record the letters from Mr. Roudebush and Mr. Hechler and my replies thereto.

If there is no objection, it is so ordered.

Mr. RYAN. Mr. Chairman.

The CHAIRMAN. Mr. Ryan.

Mr. RYAN. I have not had the privilege of reading the letter from Mr. Hechler to the chairman.

However, having read the letter of June 9, 1961, from the distinguished member from Indiana to the chairman, I question whether any useful purpose would be served by placing it in the record.

And I particularly call the committee's attention to the last paragraph, which I think, with all due respect to the author of it, contains a vague statement, and, in a sense, not the responsible type of statement which I think the committee should insert into the record.

Mr. FULTON. May we have the letter read, please?

Mr. BELL. May we have the letter read?

Mr. RYAN. I am referring to this last paragraph.

The CHAIRMAN. Off the record.

Mr. FULTON. I object to off the record. Read it.

Mr. ANFUSO. Off the record—

Mr. FULTON. I object to off the record. Let us hear it on the record.

Mr. CORMAN. Mr. Chairman.

The CHAIRMAN. Mr. Corman.

Mr. CORMAN. I want to inquire on the effect of our inserting this into the record?

Does it have the same effect as if the gentleman made the remarks verbally at this time?

The CHAIRMAN. My colleague, Mr. Roudebush, wrote me the letter. I presented it to the committee to show the manner in which this matter arose.

Now since my colleague is here and he wrote the letter, I will recognize him.

Mr. ROUDEBUSH. Mr. Chairman—off the record, again. I have no idea of exactly the terminology in my letter, and—

Mr. FULTON. I object to off the record.

Mr. ROUDEBUSH. My reason for wanting to go off the record: I do not have a copy at my hand—

Mr. MORRIS. Mr. Chairman, a parliamentary inquiry.

The CHAIRMAN. State the parliamentary inquiry.

Mr. MORRIS. Was it by unanimous consent that you asked to go off the record?

The CHAIRMAN. No. I presented the letters, and the replies from me, and asked unanimous consent to insert it into the record.

Mr. MORRIS. And I understand the parliamentary inquiry is that the gentleman from Pennsylvania objects to your request?

The CHAIRMAN. That is right.

I think the person to be recognized ought to be Mr. Roudebush.

Mr. RIEHLMAN. Mr. Chairman, may I be heard at this time?

The CHAIRMAN. Let me first present Mr. Roudebush with a copy of his letter.

Give Mr. Roudebush his original letter, Mr. Finch.

After he looks it over, I recognize the gentleman.

Mr. ROUDEBUSH. I believe the objection of the gentleman from New York was to the last paragraph, is that correct?

Mr. RYAN. Yes. I felt that the committee should not adopt this as possibly reflecting the attitude of the committee without debate.

Mr. ROUDEBUSH. It reads as follows.

I think it is high time that our committee—

Mr. ANFUSO. Is this on the record or off the record?

Mr. ROUDEBUSH. I am happy to have it on the record. It is my considered opinion that it is true.

I think it is high time that our committee looked into some of these grants which are being made by the National Science Foundation and determine whether or not any security measures are being exercised. It is quite possible that there are many "pinkos"—

that word appearing in quotes—

being subsidized in their study through the use of tuition grants by the Foundation, so they may aptly assist in the overthrow of our Government.

I think it is an excellent statement. [Laughter.]

Mr. FULTON. I move that the part be read to which there is no objection. Let us do that.

The CHAIRMAN. Is there any objection to the other letters?

(No response.)

The CHAIRMAN. If not, then the other letters from Mr. Hechler and Mr. Roudebush will be inserted, and my replies thereto will be inserted in the record—

Mr. VAN PELT. Mr. Chairman.

The CHAIRMAN. Yes.

Mr. VAN PELT. There is objection. If one letter is put in, they should all be put in.

The CHAIRMAN. Is there any objection?

Mr. BELL. Mr. Chairman, I have a question. Does insertion of this letter in any way imply adoption of the ideas stated therein on the part of this committee?

The CHAIRMAN. I would say not. But I will yield to Mr. Roudebush to explain—

Mr. ROUDEBUSH. I will say to Mr. Bell, I had intended for it to imply that.

My letter clearly says I think it is high time that this committee investigate and see if security measures were being exercised. And I certainly would like to say again today I think it is high time that we do that.

Mr. ANFUSO. Mr. Chairman, I raise a point of order.

The CHAIRMAN. Mr. Anfuso.

Mr. ANFUSO. I raise a point of order of parliamentary procedure. As a lawyer, in my view it is wrong to insert gratuitous statements which may not be supported by the evidence. In my opinion, any letter written of this kind is self-serving, with all the good intentions

that may be attributed to the writer. I have no doubt that the best intentions were implied in the letters submitted by my two distinguished colleagues. But I do think that we ought to follow parliamentary procedure and let us hear the witnesses and not introduce volunteered statements.

Mr. CASEY. Will the gentleman yield?

Mr. ANFUSO. Yes.

Mr. CASEY. As I understood the chairman's statement, he was just inserting this to show why this meeting was called.

The CHAIRMAN. That is correct, to show how this matter arose.

We are not actually trying to prove anything with these letters, but to show the reason for the hearings.

Mr. ANFUSO. Mr. Chairman, I think you can do that by making the statement that letters came to you by distinguished colleagues and that you have responded to them, and that is the reason this hearing has been called, without introducing the letters into evidence at this time.

The CHAIRMAN. Is there any objection to inserting the three letters in the record, other than Mr. Anfuso's?

(No response.)

The CHAIRMAN. If not, then the other letters are inserted in the record, to show the manner in which these hearings arose. Now, the letter of June 9 is the one objected to.

Mr. CASEY. Mr. Chairman, I make a motion that the letter of June 9 go in the record.

The CHAIRMAN. You heard the motion.

Mr. Moeller.

Mr. MOELLER. Is there a preceding motion that the other two letters be inserted?

The CHAIRMAN. No, they are inserted.

Mr. MOELLER. They are inserted.

The CHAIRMAN. Yes, sir.

Mr. MOELLER. I think it is a grave error, Mr. Chairman. I think we should have a record vote of the membership whether or not these letters should be a part of the hearing.

Mr. CASEY. Well, I just made a motion.

The CHAIRMAN. Well, I will withdraw all of the letters, and simply say—

Mr. FULTON. I object.

Mr. CASEY. Mr. Chairman, I amend my motion and move that all three letters be placed in the record.

Mr. MORRIS. I second the motion of the gentleman from Texas.

The CHAIRMAN. All correspondence?

Mr. CASEY. Yes.

Mr. ANFUSO. Just a minute. I offer a substitute motion.

The CHAIRMAN. All right, state your substitute motion.

Mr. ANFUSO. I move that the chairman make the statement that he has received letters from Mr. Roudebush and Mr. Hechler, that he has responded to these letters asking for this inquiry, and that nothing else be placed in the record at this time.

Mr. MOELLER. Second.

The CHAIRMAN. I already made the statement; but I will make it again.

I received a letter on June 9 from Mr. Richard L. Roudebush, our colleague, calling my attention to the fact that on June 8 Representative Gordon Scherer had inserted in the Congressional Record on page 9123, a statement regarding the Yellin case.

I replied at once to this letter.

Subsequently, I received from our colleague from West Virginia, Mr. Hechler, a letter also referring to the Yellin case, and calling my attention to the need for an inquiry by the committee.

I replied to both of them, stating the committee staff was working on the matter and that we hoped to have a hearing at a very early date. Now, that is it.

Mr. ANFUSO. Now, we are having such a hearing, and that is the extent of my motion.

The CHAIRMAN. Yes. You heard the motion. All in favor——

Mr. FULTON. No. I ask to be heard before it is put to vote.

The CHAIRMAN. Make your statement.

Mr. FULTON. The first point comes up that when the letter is read by the gentleman from Indiana, Mr. Roudebush, or any part of it, it is in the record, at least the part that he read. And I object to taking any of it out. That is the first point.

The second point is this——

The CHAIRMAN. I now rule on that objection. It is too late. It is already part of the record.

Mr. FULTON. It is part of the record. That is not going out. We are just saying what this concerns.

The next point is this: If people are interested enough to write the chairman about having a hearing about any subject whatever and give their own views, my feeling is more to them.

So when the gentleman from West Virginia and the gentleman from Indiana both wrote to the chairman and he replied saying that he would be glad to have a hearing, I think that is fine.

Now, I have a letter that I wish you would read. And put in the record right here.

Mr. ANFUSO. Just a minute. Will you yield to me a minute?

Mr. FULTON. No; not until he reads the letter.

I wish you would read my letter. Just read my letter, Mr. Chairman.

Mr. ANFUSO. I object to the reading of any letters.

Just a minute, I wish you would hear me for a minute.

The CHAIRMAN. I think we have to dispose of the pending motion before we take up a new one.

Mr. FULTON. I wish you would read my letter.

The CHAIRMAN. Well, not until you dispose of the pending motion.

Mr. FULTON. My note says:

Mr. Chairman, let us please proceed with the hearing.

[Laughter.]

Mr. ANFUSO. The business before the committee is on the motion.

The CHAIRMAN. All in favor make known by saying aye——

Mr. MORRIS. A parliamentary inquiry——

(Chorus of "Mr. Chairman.")

The CHAIRMAN. Now, gentlemen, in fairness to the committee, and so that the contents of these letters may not be misconstrued, I want to tell you this, that I control the correspondence. And I am going to

give them to the press. There is nothing there that is harmful. There is nothing in them that cannot be released. We do not want the press to feel we are holding back any information at all.

Mr. ANFUSO. Mr. Chairman, may I clarify the reason for my motion?

I do not like to see a bad precedent set in this committee.

Now, these two gentlemen, Mr. Roudebush and Mr. Hechler—they are gentlemen for whom I have the highest respect. I know that they would not do anything improper.

But the time may come when some Member of Congress, in carrying out some kind of an argument that he would like to extend, may bring in gratuitous matters which are not supported by the evidence. And as a matter of legal procedure I say that that is absolutely wrong.

The CHAIRMAN. There is no motion pending now. So let us proceed with the hearing.

Mr. ANFUSO. All right.

Mr. FULTON. No, there is a substitute motion.

The CHAIRMAN. We voted on the substitute.

Mr. ROUDEBUSH. Point of order. There was no announcement by the Chair on the adoption of the substitute motion.

Mr. MORRIS. Mr. Chairman, I ask for a show of hands—a division on the vote.

The CHAIRMAN. A division is demanded on the vote.

Mr. MORRIS. On the substitute.

The CHAIRMAN. All in favor of the substitute motion—

Mr. FULTON. Mr. Chairman, I have a substitute motion.

I move we table the two previous motions and go along with the hearing.

The CHAIRMAN. Let us finish it. All in favor make it known by raising their right hands.

(Show of hands.)

The CHAIRMAN. All opposed, the same sign.

(Show of hands.)

Mr. FINCH. Eleven opposed and five for.

The CHAIRMAN. So the substitute is refused.

Now, that brings us to the motion to insert into the record the correspondence showing how this matter arises.

All in favor of this motion, duly seconded—

Mr. CORMAN. Mr. Chairman.

The CHAIRMAN. Does the gentleman have a parliamentary inquiry?

Mr. CORMAN. No. Information from the maker of the motion.

I am trying to figure out if a vote of "yes" indicates merely a consent to the member who wrote it, to make the statement, or constitutes a confirmation by the committee of the facts in the letters.

The CHAIRMAN. It shows simply the passage of correspondence and the way in which this hearing arose.

Mr. FULTON. I ask for a rollcall on that.

Mr. DUCANDER. I think you have to call the roll. I will get the rules.

The CHAIRMAN. While we are getting the rules, will you call the roll, Mr. Finch?

All in favor make it known by saying "aye," all opposed by saying "no."

(Rollcall.)

Mr. FINCH. Mr. Chairman, on this vote 14 vote "aye," 1 not voting, and 2 vote "nay."

The CHAIRMAN. The "ayes" have it. The motion is adopted and the letters will be inserted in the record at this point.

(The letters are as follows:)

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D.C. June 9, 1961.

HON. OVERTON BROOKS,
House Office Building.

DEAR COLLEAGUE: I was amazed, appalled and, frankly, downright angry upon reading the remarks of Representative Gordon Scherer (Republican, of Ohio) in the June 8 Congressional Record. The remarks to which I refer appear on page 9123.

I remember so very well the investigation conducted in February 1958 by the Un-American Activities Committee of the House in Gary, Ind. These hearings were designed to show Communist infiltration of defense plants in this highly industrialized area. The Edward Yellin case came to my attention at that time since it did command considerable space in the newspapers in Indiana and throughout the United States. The details of these hearings are accurately reported in Representative Scherer's remarks, and I request your attention to these printed remarks.

This 33-year-old-graduate student of the University of Illinois was convicted of contempt of Congress in April 1960 for his failure to respond to questions concerning his part in the colonization activities of the Communist Party. This conviction was in Federal court at Hammond, Ind.

I am sure it will be as infuriating to you as it is to me to know that on March 15, 1961, the National Science Foundation, over which our committee has jurisdiction, gave a tuition grant of \$3,800 to this questionable character.

I think it is high time our committee looked into some of these grants which are being made by the National Science Foundation and determine whether any security measures are being exercised. It is quite possible that there are many "pinkos" being subsidized in their study through the use of tuition grants by the Foundation so that they may aptly assist in the overthrow of our Government.

Sincerely,

RICHARD L. ROUDEBUSH.

COMMUNIST SUBVERSION OF THE UNITED STATES FROM WITHIN

The SPEAKER. Under the previous order of the House, the gentleman from Ohio [Mr. Scherer] is recognized for 10 minutes.

Mr. SCHERER. Mr. Speaker, more and more every day it seems that we are literally falling over ourselves to help the Communists subvert this Nation from within and to win the cold war.

I have been shocked and sickened by what has happened in the case of Edward Yellin, whose conviction for contempt of Congress for refusal to testify concerning his Communist activities within basic industry was recently affirmed by the U.S. circuit court of appeals.

In recent years the Communist apparatus in the United States has secretly placed highly educated, dedicated, young Communists on the assembly lines of industrial plants in this country for the purpose of promoting Communist activities in labor and converting working people to the Communist cause. These young Communists, when applying for a job at the factory level, fail to disclose their educational training and qualifications in order not to arouse the suspicion of the employer or of the man who works next to them on the assembly line whom it is their job to indoctrinate. This Communist program is referred to as the colonization of industry.

In February of 1958 I was one of the members of the Committee on Un-American Activities which was holding hearings at Gary, Ind. The purpose of the hearings was to reveal the colonization practices by the Communist Party taking place in defense plants in this highly industrialized area.

Edward Yellin was called as a witness. He had been previously identified under oath by at least two persons as a member of the Communist Party. Some

years before he had made application for employment at the Carnegie-Illinois Steel Corp. In his application, on the basis of which he was subsequently employed as an electrician's helper, he followed the colonizing plan of the Communist apparatus and failed to disclose the fact that he had received a rather extensive education at both the City College of New York and the University of Michigan. In the application he falsely contended that he had been employed in menial capacities with a number of other companies during the time that he was attending these two universities.

During the hearings in February of 1958 Yellin refused to answer questions of the committee. In April of 1960 he was convicted by the Federal court in Hammond, Ind., for contempt of Congress for failure to answer questions concerning his part in the colonization activities of the Communist apparatus. This was the conviction which has been recently affirmed.

Now we come to a series of events which it will be difficult for the average American to believe could happen.

Following the disclosures in the hearings at Gary, the tax-exempt Ford Foundation gave Yellin a grant under which he enrolled in the University of Illinois to further his engineering studies. He had already received his bachelor of science degree in mechanical engineering from Colorado State University. It was while at the University of Illinois under this Ford Foundation grant that he was tried and convicted for his conduct during the hearings of the Committee on Un-American Activities in Gary, Ind., in 1958.

Yellin was suspended by the Graduate School of the University of Illinois for only 10 days at about the time of his trial in Federal court. However, in spite of his conviction, a board made up of professors in the graduate school reinstated him. One of the officials of the university, in justifying his reinstatement, said that the conviction in the Federal court for contempt of Congress for failure to tell about his Communist colonization activities was only a misdemeanor and compared it to a traffic violation for which no suspension from the university could be justified.

The next disclosure was the straw that broke the camel's back. The National Science Foundation, which is a Federal agency created by the Congress for the purpose of promoting the progress of science in the interests of national defense and for other purposes, less than 3 months ago, on March 15, 1961, awarded Yellin a total of \$3,800 in taxpayer's money to continue his studies at the University of Illinois. This fellowship award was made just 11 months after his conviction in the Federal court.

It must be kept in mind that the University of Illinois has Federal funds of approximately \$2.5 million for scientific research in highly secret and classified fields for the U.S. Government. While Yellin is not participating in these research projects, he does have close association with those who are engaged in this work.

While the representatives of the National Science Foundation contend that it was not until recently that they had knowledge of Yellin's record, it is inconceivable that these fellowships should be awarded with practically no investigation of the applicant's background. The slightest inquiry into Yellin's record should have revealed to any agency seriously attempting to evaluate an applicant's background, his testimony before a congressional committee, his trial and conviction in a Federal court, and the current affirmation of that conviction by the U.S. Circuit Court of Appeals. Furthermore, all of this was known to the officials of the University of Illinois, who did make recommendations that Yellin be granted this fellowship for further study at the University of Illinois.

Apparently there was a conspiracy of silence and an unwillingness to take even the most casual look at Yellin's background. Is this not rather appalling when one considers that persons, particularly women, have been discharged from Federal employment because they misrepresented their age or marital status on their employment applications?

It is significant that the National Science Foundation, a Federal agency, has up to this point refused on instructions from the White House to furnish for the record of the Committee on Un-American Activities, which is investigating this matter, the recommendations of the officials from the University of Illinois that Yellin be granted this fellowship. It is contended that these recommendations were made in confidence and, therefore, Congress, which created the National Science Foundation and whose duty it is to make any necessary changes in the law, cannot have the files of persons who are granted taxpayer's money.

It is astounding that such a position should be taken when these recommendations have been reviewed for the National Science Foundation by committees of professors selected to evaluate the applicant's qualifications for a grant. These professors are not Government employees; they are no more part of the executive branch than the man in the moon.

JUNE 10, 1961.

HON. RICHARD L. ROUDEBUSH,
House of Representatives, Washington, D.C.

DEAR DICK: I have your letter of June 9 concerning the remarks of Representative Gordon Scherer appearing on page 9123 in the Congressional Record of June 8. I am already familiar with this matter.

I think your idea is correct, and I am asking for a complete, comprehensive investigation by the full committee. At first blush, it appears that the National Science Foundation wants scholarship grants made on the basis of recommendations from the several schools throughout the United States. Regardless of this, I think we should investigate the matter thoroughly and await the completion of the committee investigation as to recommendations for further action, if such should be indicated.

With kind personal regards, I am,
Sincerely yours,

OVERTON BROOKS, *Chairman.*

JUNE 12, 1961.

HON. OVERTON BROOKS,
House of Representatives, Washington, D.C.

DEAR OVERTON: Thank you for your prompt and affirmative response to my letter concerning the educational grant made by the National Science Foundation to Edward Yellin.

I commend your forthrightness and expediency in deciding to investigate fully this matter.

Since my original correspondence with you, several other of our colleagues on the committee have expressed concern and interest in probing these types of grants.

I believe we have the opportunity to provide a real service if we can make positive that these grants are given to deserving students who have the best interests of America at heart.

You have assurance of my utmost cooperation in this investigation.

With kind personal regards, I am,
Sincerely yours,

RICHARD L. ROUDEBUSH.

JUNE 13, 1961.

HON. OVERTON BROOKS,
Chairman, House Space Committee.

DEAR OVERTON: In line with our recent conversations and correspondence regarding National Science Foundation educational grants I noticed today on page 2 of the Foundation's daily notification of grants that a grant has been approved for a touring Russian scientist.

The notification of award by the Foundation lists \$4,350 to Academician A. P. Topchiev, vice president of the Academy of Sciences of the U.S.S.R. and party which are on a visit to the United States.

Apparently we are paying Russian scientists to take a look at our research and scientific facilities.

I thought this would be of interest to you and perhaps might be included for explanation by Foundation officials as the full committee's investigation of other grants gets underway.

With best personal wishes, I am,
Sincerely yours,

RICHARD L. ROUDEBUSH.

JUNE 14, 1961.

Hon. RICHARD L. ROUDEBUSH,
House of Representatives, Washington, D.C.

DEAR DICK: I have your letter of June 13. When we start our hearings, we will decide how far to go in the matter.

With warm personal regards, I am
Sincerely yours,

OVERTON BROOKS, *Chairman.*

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D.C., June 12, 1961.

Hon. OVERTON BROOKS,
*Chairman, House Committee on Science and Astronautics,
New House Office Building, Washington, D.C.*

DEAR MR. CHAIRMAN: I am in receipt of a letter dated June 9 from our colleague Congressman Roubenush.

I am sure that you share my concern for the facts which he brings out with relation to National Science Foundation grants. It seems incredible that Federal funds should be used to subsidize those, like the case mentioned, convicted of contempt of Congress for failure to respond to questions relating to the subject's colonization activities of the Communist Party.

It is hoped that a full investigation lies within the jurisdiction of our committee, the Committee on Education and Labor, or the Un-American Activities Committee, but I believe our committee should at least make inquiries and initiate some investigation to determine the facts and possible basis for future action.

Your servant in Congress,

KEN HECHLER.

JUNE 12, 1961.

Hon. KEN HECHLER,
House of Representatives, Washington, D.C.

DEAR KEN: I have your letter of June 12 in regard to the use, or misuse, of scholarship funds distributed under the jurisdiction of the National Science Foundation. These scholarship funds, or grants, have been awarded, as I understand it, by following the recommendations of the various schools throughout the country.

I have asked the committee staff to proceed immediately with an investigation into this matter, and I am hopeful that we can stage such an investigation next week or in the very immediate future.

With kind personal regards, I am
Sincerely yours,

OVERTON BROOKS, *Chairman.*

The CHAIRMAN. Now, Dr. Waterman, we are pleased to have you here this morning.

You know the subject matter of the inquiry. Do you have a prepared statement for us?

Dr. WATERMAN. Yes, sir; I do.

The CHAIRMAN. Will you proceed with your prepared statement?

Dr. WATERMAN. Thank you, Mr. Chairman.

STATEMENT OF DR. ALAN T. WATERMAN, DIRECTOR, NATIONAL SCIENCE FOUNDATION

I and my colleagues are appearing here this afternoon to explain in detail the situation with respect to Mr. Edward Yellin, who on March 15, 1961, was awarded a graduate fellowship by the National Science Foundation along with 1,536—

Mr. FULTON. May I interrupt you, Dr. Waterman?

I would like—not for Dr. Waterman—for the witnesses in this hearing to be sworn.

The CHAIRMAN. Frankly, I see no need of it. These are all Government witnesses. Nobody has sought to impugn the integrity of any of the witnesses.

Mr. FULTON. The House Committee on Science and Astronautics, when the same question came up Wednesday, June 27, 1960, the chairman then said on page 2 of the hearings:

Thank you very much. Before you begin your statement, we are swearing in all the witnesses in these hearings. Therefore, I will ask all those who expect to testify today to stand up and I will swear them all in at one time.

The first one was Dr. Glennan, head of NASA. The second one was Dr. Dryden. The third one was Mr. Horner. And then Mr. Johnson and Mr. Keller.

Mr. Keller is the General Counsel of the Comptroller General, appointed in 1960—or 1959. And with him today, he had Laurence J. Powers, then Assistant Comptroller General, Mr. E. K. Gerhardt, Associate Director of the Civil Accounting and Auditing Division, and Mr. Irwin M. Crawford, Superintendent of Accounts. All Government employees.

I think we are going to have others up here that I would like to have them under oath. So that I think what we ought to do is start at the beginning, when it is most appropriate to make the ruling.

The CHAIRMAN. I think, if our proceeding were like the Un-American Activities Committee, which it is not, it might be a little different.

But frankly, I cannot imagine these witnesses coming up here to advise us with respect to needed legislation, telling us other than what is in their hearts.

Mr. ANFUSO. I see no necessity, Mr. Chairman.

The CHAIRMAN. Just proceed, then, Doctor.

Mr. FULTON. Do I understand—what is the ruling, please?

The CHAIRMAN. Well, there was no second to your motion. I ruled.

Mr. FULTON. I requested the chairman. If it is refused I would like to know it.

The CHAIRMAN. I see no need for it. It is refused.

Mr. FULTON. I move all the witnesses be put under oath.

The CHAIRMAN. You heard the motion. Is there any second to the motion?

[No response.]

The CHAIRMAN. If not, it fails for lack of a second.

Now, Doctor, will you proceed.

Dr. WATERMAN. Perhaps I had better repeat the first sentence, which I did not quite complete, Mr. Chairman.

I and my colleagues are appearing here this afternoon to explain in detail the situation with respect to Mr. Edward Yellin, who on March 15, 1961, was awarded a graduate fellowship by the National Science Foundation along with 1,536 other individuals.

I might point out that the names of all fellowship recipients and information on all grants made by the Foundation are published in our annual reports.

Mr. Yellin has been a graduate student at the University of Illinois. In accordance with our fellowship announcement, he applied for an

intermediate fellowship requesting assistance for his studies in mechanical engineering at the second year graduate level. These fellowships are awarded in accordance with section 10 of the National Science Foundation Act of 1950 which states:

The Foundation is authorized to award, within the limits of funds made available specifically for such purpose pursuant to section 17, scholarships and graduate fellowships for scientific study or scientific work in the mathematical, physical, medical, biological, engineering, and other sciences at appropriate nonprofit American or nonprofit foreign institutions selected by the recipient of such aid, for stated periods of time. Persons shall be selected for such scholarships and fellowships from among citizens of the United States, and such selections shall be made solely on the basis of ability; but in any case in which two or more applicants for scholarships or fellowships, as the case may be, are deemed by the Foundation to be possessed of substantially equal ability, and there are not sufficient scholarships or fellowships, as the case may be, available to grant one to each of such applicants, the available scholarship or scholarships or fellowship or fellowships shall be awarded to the applicants in such manner as will tend to result in a wide distribution of scholarships and fellowships among the States, territories, possessions, and the District of Columbia.

In accordance with this section, fellows are selected on the basis of academic records, recommendations regarding their scientific ability, and on the results of test examinations. Evaluation of each applicant's qualifications is made by a panel of scientists appointed by the National Academy of Sciences-National Research Council which assists the National Science Foundation in the evaluation of applicants. On the basis of the criteria just mentioned, Mr. Yellin was placed in a quality group to which awards were made and one was therefore made to him.

At the time the award was made to Mr. Yellin, we had no knowledge of the difficulties in which Mr. Yellin has been involved. A few weeks after the award had been made, however, a member of the staff of the House Un-American Activities Committee brought to our attention the fact that in the spring of 1960 Mr. Yellin had been found guilty of contempt of Congress by the U.S. District Court for the Northern District of Indiana, Hammond division, for refusing to answer questions propounded to him by the committee in February 1958, the court rejecting Mr. Yellin's contention that under the first amendment to the Constitution he was not required to answer the committee's questions.

Mr. Yellin appealed to the Court of Appeals for the Seventh Circuit which affirmed the conviction on February 16, 1961. He has now filed a petition for certiorari with the Supreme Court of the United States. At the time of the hearing at which Mr. Yellin refused to answer questions, the House Un-American Activities Committee was investigating the matter of Communist colonization of the steel industry and had produced testimony from other witnesses which indicated that the Communist Party was attempting to place bright young persons into the steel mills under the guise of being ordinary workers in order that they might exercise influence on the other workers. The committee also produced an application for employment submitted by Mr. Yellin to the Carnegie-Illinois Steel Corp., showing that Mr. Yellin had not revealed that he had attended college for 2 years prior to his application.

During the course of recent hearings on this matter before the House Un-American Activities Committee, we learned from the com-

mittee that at some point Mr. Yellin had been suspended by the University of Illinois because of the court proceedings but that, following questioning by university officials, he had been reinstated after a 10-day period.

Each fellowship applicant is required by section 16(d) of the National Science Foundation Act of 1950 to execute an affidavit that "he does not believe in, and is not a member of, and does not support any organization that believes in or teaches the overthrow of the U.S. Government by force or violence or by any illegal or unconstitutional methods," as well as the oath of allegiance to the United States. Mr. Yellin complied with these requirements. I might point out that, at the time the National Science Foundation Act of 1950 was being debated in the Congress, the matter of whether fellowship applicants should be investigated was considered by the Congress at that time and rejected, and the affidavit and oath substituted therefor.

We have, of course, been very concerned about this matter. It raises some exceedingly complex questions, both from an administrative and from a legal point of view. In this case, while Mr. Yellin has been awarded a fellowship—that is, he has been notified of the award—no payments have been made to date with respect to it, nor will any be made until the matter has been thoroughly considered at a special meeting soon to be held by the National Science Board, which has responsibility for establishing the policies of the National Science Foundation.

As we see it, under the legislative mandate with respect to fellowships, requiring that they be awarded "solely on the basis of ability," matters relating to the applicant's ability can be taken into account. Moreover, if it is clear that the oath or affidavit has been executed falsely, we would deny a fellowship to the applicant. Thus, one who believes in the overthrow of the U.S. Government by force or violence, or stands convicted of a crime involving the Nation's security, thereby indicating his inability to execute a valid oath of allegiance or affidavit, would clearly not be entitled to receive an award. Cases which do not reflect on ability or do not clearly indicate false execution of the oath or affidavit raise the difficult questions to which I referred earlier. Where a false execution of the affidavit and oath might be involved we, of course, refer the matter to the Department of Justice for its consideration. We have done so in this case. However, the facts as known to us at this time do not appear to warrant refusal on the grounds of a false affidavit or oath. Nor does Mr. Yellin's conviction necessarily indicate lack of scientific ability.

This case appears to be singular. We share with you a desire to see National Science Foundation fellowships advance the welfare of the country, to the greatest degree possible, and hope that out of the deliberations of the National Science Board and these discussions with you will come ideas for making their contributions still more effective.

That concludes my statement, Mr. Chairman. I will be happy to try to answer any questions you may have.

The CHAIRMAN. Thank you, Doctor. We would like to ask you a few questions. And I know most of the members of the committee would, too.

Apparently this man filed an affidavit and the affidavit did not go to the court in the form where you feel there is any misstatement of fact?

Dr. WATERMAN. We know of none. He duly filed the oath of allegiance and the affidavit with us.

The CHAIRMAN. Well, was it the failure to state that he had been convicted of a crime involving more than a year's sentence?

Dr. WATERMAN. He signed the affidavit in the form in which I read it to you, Mr. Chairman, which is that he is not now a member of a party that believes—I can repeat that, if you like.

The CHAIRMAN. Yes.

Dr. WATERMAN. His affidavit was just the one that I read verbatim.

The CHAIRMAN. If you would repeat that, I would appreciate it.

Dr. WATERMAN. The affidavit requires, and the candidate must sign this, that he does not believe in and is not a member of, and does not support any organization that believes in or teaches the overthrow of the U.S. Government by force or violence or by any illegal or unconstitutional methods. That plus the oath of allegiance.

I can read the oath, if you wish.

The CHAIRMAN. If you will do that, sir.

Dr. WATERMAN. This he has to sign, in addition to the affidavit.

I do solemnly swear or affirm that I will bear true faith and allegiance to the United States of America and will support and defend the Constitution and laws of the United States against all its enemies, foreign and domestic.

The CHAIRMAN. Well, now, what was he convicted of?

Dr. WATERMAN. Contempt of court.

Mr. HOFF. Congress.

Dr. WATERMAN. Of Congress, I beg your pardon.

The CHAIRMAN. Contempt of Congress. And that was affirmed by the court of appeals?

Dr. WATERMAN. Yes, sir.

The CHAIRMAN. There is nothing then, you feel, in the statement that affects his ability to make an affidavit?

Dr. WATERMAN. It should not, I think, affect his affidavit, unless the Department of Justice could prove perjury.

The question is: Does the conviction relate to the ability of the candidate to pursue his studies?

The CHAIRMAN. That is right.

Now, then, there is no requirement under the law that would permit you to deny a fellowship to a certified candidate on the ground that he had been guilty of crimes of any character; is that it?

Dr. WATERMAN. That is correct, yes, sir; unless this could be shown to bear on the ability of the candidate.

The CHAIRMAN. Yes; unless it showed he was communistic.

Dr. WATERMAN. Or that this implied that he had no right to sign the affidavit, of course.

The CHAIRMAN. You wouldn't say that the fact that he is sentenced to serve a year's imprisonment might affect his ability to execute the terms of the fellowship?

Dr. WATERMAN. Of course, if he actually spent time in prison, he could not use the fellowship there. [Laughter.]

Mr. MORRIS. I am sure he couldn't.

The CHAIRMAN. As the fellowship wouldn't apply to him in prison.

Mr. ANFUSO. Mr. Chairman, would you yield to me at that point?

The CHAIRMAN. I will yield to my colleague.

Mr. ANFUSO. Dr. Waterman, so that I may understand your testimony, is it your contention that even though the Committee on Un-American Activities advised you a few weeks after you made the award that this man had been guilty of contempt of Congress and that his conviction was later affirmed by the court of appeals—is it your contention that in spite of those facts, since this did not go into the question of the man's ability, that you were powerless under the law to deny him the fellowship?

Dr. WATERMAN. That has been our general position unless the facts have a bearing on his ability. And, of course, we did refer the matter to the Department of Justice to see if there was any question about the affidavit.

Mr. ANFUSO. Of course, you realize how serious that is?

Here you are being advised by an official body that this man has been convicted for a most serious crime, and yet because it doesn't go into the question of ability you must grant him the fellowship under the law as written?

Dr. WATERMAN. That is the way it appears to us.

Mr. ANFUSO. All right. That is what I thought. In that respect, then, you feel that the law should be amended, don't you?

Dr. WATERMAN. If that is the wish of Congress, of course, this would be the way we would have to interpret it.

Mr. ANFUSO. Wouldn't that be the wish of the foundation too, to deny Communists the right to receive fellowships?

The CHAIRMAN. Will the gentleman suffer an interruption?

Let me make this statement, because I—

Mr. ANFUSO. I would like to get an answer to my question.

The CHAIRMAN. I was quizzing the witness. But let me make the statement.

The bells have just rung. How many were there, two bells?

Mr. DUCANDER. Three bells.

The CHAIRMAN. Yeas and nays, on Reorganization Plan No. 2.

We will continue until the bells are heard again. Then we will adjourn until tomorrow morning at 10 o'clock.

Now let's proceed. Is that all right with you, Doctor?

Dr. WATERMAN. That is all right.

The CHAIRMAN. Do you have at this time any recommendations to make to this committee in reference to changes in the law?

Dr. WATERMAN. Not at the present time, Mr. Chairman.

I hoped that perhaps in the discussion today I might get some of your ideas about this.

I do plan to take this up with our National Science Board. As you know, I am required to go to our National Science Board on policy matters. And this is certainly one. We would like to see how we would treat matters like this in the future. What recommendations we might have.

The CHAIRMAN. That is the same Board that we had the pleasure of having here with us.

Dr. WATERMAN. Yes, it is.

The CHAIRMAN. Mr. Bell wanted to ask a question.

Mr. BELL. Mr. Chairman.

The CHAIRMAN. Yes.

Mr. FULTON. Are we going to have regular order?

Go ahead.

The CHAIRMAN. Well, he asked me to yield to him, and I yielded for a question.

Mr. BELL. Dr. Waterman, your original statement was that you had a loyalty oath and an affidavit that was required of this man, Yellin. Do you not feel that that implied some responsibility on the part of the National Science Foundation to check this out thoroughly?

Dr. WATERMAN. Our position there is, of course, that we have to take the affidavit as it comes to us, and that then if the man signs it, that it is our duty to turn the matter over to the Department of Justice, if we hear any report that it is possible the man should not have signed it.

But I don't think we should be an investigative agency in that sense. It is up to them.

The CHAIRMAN. Mr. Casey.

Mr. CASEY. Mr. Chairman, I would like to know if we could have Mr. Yellin's application for the grant—if that is available.

Dr. WATERMAN. Yes, indeed.

The CHAIRMAN. The application.

Mr. CASEY. And a copy of the oath.

Mr. MORRIS. I ask unanimous consent it be inserted in the record.

Mr. CASEY. And I would like to ask unanimous consent that it be inserted in the record.

Dr. WATERMAN. Yes, sir.

Mr. RUTTENBERG. I have them at hand. I can give them to you.

Mr. CASEY. Does the application show where he exercised the grant?

Dr. WATERMAN. Yes.

Mr. CASEY. Where does it reflect that he wanted to study?

Dr. WATERMAN. He wanted to take this at the University of Illinois and at Colorado State University this summer.

The CHAIRMAN. The regular order has been requested here. I have a statement to make, and one more question, and then I am through.

I think, in fairness to Dr. Waterman, I believe I would reflect the views of the members of this committee when I would ask him not to make any payments under this fellowship grant until such time as the committee has had an opportunity to act on the matter.

Dr. WATERMAN. I have already stated we would not do this until it has been further considered.

The CHAIRMAN. All right.

Now, Mr. Fulton, do you have questions?

Mr. ROUDEBUSH. Mr. Fulton, would you yield, please?

I will be unable to be here tomorrow, and I have one question I would like to ask.

Mr. FULTON. All right.

Mr. ROUDEBUSH. Doctor, in your statement you remarked that this award was made on March 12, 1961, is that correct?

Dr. WATERMAN. March 15.

Mr. ROUDEBUSH. March 15.

Dr. WATERMAN. March 15, yes.

Mr. ROUDEBUSH. March 15, 1961. I beg your pardon.

According to my records in the office, the members of this committee were not notified of this award until June of 1961. I think the date was June 12.

Is that common or is that unusual, that a 3-month lag should be made in that case?

Mr. RUTTENBERG. You are talking about something else, Mr. Roudebush. The fellowship application is one thing, but I think, if you are referring to your press release today, that was a grant. That grant was made June 12.

Mr. ROUDEBUSH. The grant was made, was actually made in June, is that correct?

Mr. RUTTENBERG. The grant that you had a press release on, that I have heard about today, was made on June 12.

Dr. WATERMAN. To answer your question, we did furnish the fellowship list promptly.

Mr. ROUDEBUSH. I must have skipped that one. Because I have the entire list, and I was just raising that question, Doctor.

Dr. WATERMAN. We made a complete press release at the time, you see.

Mr. ROUDEBUSH. Thank you very much.

The CHAIRMAN. Now, Mr. Fulton, will you proceed, since you were the one demanding regular order?

Mr. FULTON. No, I simply suggested we try to proceed in a little more orderly fashion.

Mr. FULTON. The question comes:

When did this man first make an application, and by what means?

Dr. WATERMAN. Beg pardon?

Mr. FULTON. When did this man, Yellin, first make an application to you people, and by what means?

Dr. WATERMAN. In the normal course of events. His application had to be in by January 1, 1961, along with all these others.

Mr. FULTON. In writing, on your form?

Dr. WATERMAN. That is right.

Mr. FULTON. And you are producing that, I understand, for the record, as well as any papers that you have in your file for the record?

Dr. WATERMAN. That are pertinent to this.

The CHAIRMAN. I have the application here now and, if there is no objection, it will be filed as exhibit No. 1.

(The information is as follows:)

NSF FORM
JUNE 1960 9C-54 AB

NATIONAL SCIENCE FOUNDATION FELLOWSHIPS

Affidavit and Oath

Section 16(d) of the National Science Foundation Act of 1950, as amended, Title 42, United States Code, Section 1874(d), provides as follows:

"No part of any funds appropriated or otherwise made available for expenditure by the Foundation under authority of this Act shall be used to make payments under any scholarship or fellowship to any individual unless such individual (1) has executed and filed with the Foundation an affidavit that he does not believe in, and is not a member of and does not support any organization that believes in or teaches, the overthrow of the United States Government by force or violence or by any illegal or unconstitutional methods, and (2) has taken and subscribed to an oath or affirmation in the following form: 'I do solemnly swear (or affirm) that I will bear true faith and allegiance to the United States of America and will support and defend the Constitution and laws of the United States against all its enemies, foreign and domestic.' The provisions of section 1001 of title 18, United States Code, shall be applicable with respect to such affidavits."

Section 10 of the same Act, Title 42, United States Code, Section 1869, limits the award of fellowships to citizens of the United States.

Each application for a National Science Foundation fellowship must therefore be accompanied by the affidavit and oath provided below. This affidavit and oath should be executed and sworn to before a Notary Public in the United States. Civilians abroad should execute it before an appropriate United States Foreign Service Officer and persons in military service abroad may execute it before a United States-Commissioned Officer or appropriate United States Foreign Service Officer. Affidavits and oaths executed before other officials will not be accepted.

I, Edward Leon Yellin, do solemnly swear (or affirm) that:

(Full name of applicant)

1. I will bear true faith and allegiance to the United States of America and will support and defend the Constitution and laws of the United States against all its enemies, foreign and domestic.
2. I do not believe in, and am not a member of and do not support any organization that believes in or teaches, the overthrow of the United States Government by force or violence or by any illegal or unconstitutional methods.
3. I am a citizen of the United States.

Edward Yellin
(Signature of applicant)

Subscribed and sworn to (or affirmed) before me this 3 day of JANUARY, A.D. 1961.

at Urbana, Ill. ILLINOIS
(City) (State)

[Signature]
(Signature of Notary Public)

Notary Public

(Seal) My Notary's Commission Expires July 2, 1964

Return to the Fellowship Office, National Academy of Sciences—National Research Council,
2101 Constitution Avenue, N.W., Washington 25, D. C.

NSF FORM
JULY 1946 9C-50 ARevised Program No. 92-30817
Approval Expires March 31, 1947NATIONAL SCIENCE FOUNDATION
GRADUATE FELLOWSHIP PROGRAMFellowship
ApplicationApplicants' Qualifications Evaluated by Committees of Scientists
Appointed by the National Academy of Sciences—National Research Council

Typing Instructions:

To facilitate reproduction of this form, TYPE if possible, backing this sheet with carbon to produce reverse image on the opposite side. When printing by hand, use BLACK ink. Do not use a ball-point pen.

Information on Office Cards 1 and 2 must agree with corresponding items on this Application.

1. Name in full: Mr. Edward Yellia Edward Leon
(last) (first) (middle)
2. Present address: 655 A Stadium Terrace, Champaign, Illinois
(see instructions) 655 A Stadium Terrace, Champaign, Illinois
3. Permanent U.S. residence address (see instructions): 655 A Stadium Terrace, Champaign, Illinois
4. Age: 25 Date of birth: July 2, 1927 Place of birth: New York
5. Marital status: ☐ Single ☐ Married Number of dependent children: Three (3)
6. Level of fellowship sought: ☐ First year ☐ Intermediate ☐ Terminal
7. Length of time you wish to spend on a fellowship: ☐ 9 months ☒ 12 months
(calendar year) (calendar year)
8. If you are or have been an NSF Fellow, when did you receive your first award? _____
(month) (year)

Please name the program in which the fellowship was awarded.

How many years have you held an NSF fellowship? _____

9. How many months have you been enrolled in your present academic department?
- 18 months

10. Proposed field of study:

a. Major field:

- ☐ Anthropology ☐ Earth Sciences ☐ Mathematics ☐ Psychology
- ☐ Astronomy ☒ Engineering ☐ Medical Sciences ☐ Social Sciences (see announcement)
- ☐ Chemistry ☐ Life Sciences ☐ Physics ☐ Interdisciplinary

b. Special field: MEMechanical Engineering

(See Fields of Specialization on reverse of Office Card 3)

11. Name the educational institution at which you wish to pursue your fellowship. Notify Fellowship Office of any change in choice of institution since submitting Office Cards. Note: An NSF Fellow is expected to be affiliated during his tenure with an appropriate nonprofit American or nonprofit foreign institution. An "appropriate institution" in this program is normally considered to be an institution of higher education.

University of Illinois
(institution)Mechanical Engineering
(department)Prof. S. Konso
(scientific adviser, if known)

12. Toward what degree will you be working and when do you expect to receive it?
- PhD
- January, 1953
-
- (degree) (date)

13. Colleges or universities attended including the one in which you are currently enrolled. Arrange in sequence, listing your current (or last-attended) institution first.

College or University and State in which Located	Inclusive Dates of Attendance	Earned Degree	Date Awarded or Expected	Major Field of Specialization
University of Illinois	6/59 -	None	6/61	Mechanical Eng.
Colorado State University	9/57-6/59	BSME	6/59	Mechanical Eng.
University of Michigan	1/48-8/49	-	-	Mech. Eng. and Liberal Arts
City College New York	1/45-8/45 9/48-1/48	-	-	Pre-Engineering

(Please explain any interruption of schooling, i.e., military training, illness, etc.)

U.S. Navy, 9/45-7/46; Employed by U.S. Steel 8/48-8/57.

14. Academic honors:
- Graduated as BSME from Colorado State University "with highest honors".

Member of Sigma Tau (Engineering) and Kappa Mu Epsilon (Mathematics)

15. List any researches previously pursued, giving the title and reference to any published works. List the titles and any references possible for unpublished works. Do not send any reprints or other publications. (Use reverse sheet of form.)

Copy page 2 of 3
 "Investigation of the two-phase flow of low quality steam". Conducted at Colorado State University in cooperation with the National Bureau of Standards Cryogenic Laboratory at Boulder, Colorado.

16. In what languages, other than English, are you able to read understandingly the scientific literature of your profession?

German

17. Fellowships, scholarships, teaching, and other relevant positions held since entering college or university:

POSITION	PLACE	DATE
Ford Foundation Teaching Internship Fellow	University of Illinois	9/59 - present
Teaching Assistant (full time)	University of Illinois	Summer 1959

18. Name and address of four persons, each of whom knows your academic and professional experience and ability, whom you are requesting to submit a Reference Report. At least two of the four should be persons with whom you have worked in your major field. All names given here should be identical to those listed on Office Card 1. If they differ, notify the Fellowship Office of the changes.

Dr. R.J. Maurer, Dept of Physics, University of Illinois, Urbana, Illinois

Dr. E.H. Kestel, Dept of Mechanical Engineering, University of Illinois

Dr. W.L. Chow, Dept of Mechanical Engineering, University of Illinois

Prof. S. Konso, Dept of Mechanical Engineering, University of Illinois

19. List if known (1) Faculty adviser Prof. S. Konso (2) Thesis adviser

OBJECTIVES AND LONG-RANGE PROFESSIONAL GOALS

20. All applicants must submit a detailed statement describing their proposed plan of study and/or research on the form so designated. In addition, each applicant should describe the objectives of his educational program and his long-range professional goals in the space below. My immediate objective in continuing graduate study toward the PhD is to prepare myself for a career in teaching. In the proposed plan of study I have indicated my field of specialization and the course work I have elected. I am aware that the requirements of successful teaching include mastery of subject matter, the ability to keep abreast of new developments, and the capability of making a contribution by actively engaging in research. My approach toward my course work and future investigation will be directed toward this end.

Once having achieved the discipline and competence necessary for a PhD in my field of specialization, I look forward to augmenting my development as a teacher by further study in the area of the history and philosophy of science, as my involvement as student and teacher becomes more complete, I am increasingly aware of the desirability of presenting material in an historical context

21. **CONDITION.** In the event that you receive an award, any invention or discovery that may be made or conceived by you during the tenure of your fellowship, whether or not arising out of research known to the Foundation, must be reported to the Foundation. Disposition of patent and other rights to such inventions or discoveries shall be your responsibility except that the Foundation is to be given reasonable notice of application by yourself or other persons or institutions for a foreign or domestic patent on any such invention or discovery, and, upon application for a patent, the United States Government shall receive a royalty-free, irrevocable, non-exclusive license to use such invention or discovery for governmental purposes.

I have read the application in detail and agree to the conditions therein.

Signature of Applicant:

Edward L. Yellin

Date:

1/2/61

Return to The Fellowship Office, National Academy of Sciences—National Research Council,
 2101 Constitution Avenue, N. W., Washington 25, D. C.

Mr. FULTON. From the files, there have been no papers removed, so that they are all there for this committee to have access to through its counsel; are they not?

Dr. WATERMAN. No papers have been removed.

Mr. MORRIS. Will the gentleman yield just a second?

Mr. FULTON. Yes.

Mr. MORRIS. As I understand, Doctor, you said you would furnish what papers for the record as you thought pertinent?

Dr. WATERMAN. Yes.

Mr. MORRIS. Is that correct?

Dr. WATERMAN. Well, we do have, of course, confidential information regarding the candidate which we get, and we would like to preserve the nature of that confidential information. This is available to counsel here.

Mr. MORRIS. I just want the record to show that the gentleman from Pennsylvania understood your question.

Mr. FULTON. I understood he held available to us, through our counsel only, the papers in the file.

Dr. WATERMAN. That is right.

Mr. FULTON. All of them.

Will you make those available to our committee counsel?

The CHAIRMAN. Will you do that, sir?

(Dr. Waterman nods.)

Mr. MORRIS. What is the answer to that question? I didn't hear an answer to that question, Mr. Chairman.

The CHAIRMAN. We will have to get an answer in the morning.

The committee is adjourned until tomorrow morning at 10 o'clock.

(Whereupon, at 2:50 p.m., the committee adjourned, to reconvene at 10 a.m., Friday, June 16, 1961.)

AWARDS OF FELLOWSHIPS AND SCHOLARSHIPS UNDER THE NATIONAL SCIENCE FOUNDATION ACT

FRIDAY, JUNE 16, 1961

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE AND ASTRONAUTICS,
Washington, D.C.

The committee met at 10 a.m., pursuant to adjournment, in room 214-B, New House Office Building, Hon. Overton Brooks (chairman) presiding.

The CHAIRMAN. The committee will come to order. We are happy to have Dr. Waterman, Mr. Hoff, Mr. Ruttenberg, and Dr. Fontaine here with us again this morning. Yesterday we were interrupted because of a rollcall vote. I think Mr. Fulton was questioning Dr. Waterman when we adjourned. Mr. Fulton, I will recognize you.

Mr. FULTON. This morning let us try to find the basis of what has happened, so that we can consider corrective action. I think that would be productive.

On the Yellin case, it seems to me there is either an error or mistake, or a horrible failure of some kind. My first question would be: Under the present statutes and the regulations of the National Science Foundation and the administrative setup, would you reach the same result again had you known all of the facts? That is a simple question. Would you reach the same conclusion? We want to see what might be wrong.

Dr. WATERMAN. Well, the answer to that, Mr. Fulton, the first answer I think is that this should not be regarded as an isolated case. We ought to have a policy with respect to such matters and I hope that the discussions that we have with you today will shed some light on the matter.

Mr. FULTON. But the Yellin case has happened. Had you known all of the facts at the time of the award, would the decision have been the same?

Dr. WATERMAN. As I see it, the first consideration is that we are to award fellowships on the basis of ability only, the only exception being in the case of substantially equal ability, where we make a distribution across the country, which has no bearing in this case; the second consideration is the oath of allegiance and the affidavit.

Mr. FULTON. Could you just answer the question simply and then we will go into the reasons. Under the present procedures, would the result have been the same had you known all of the facts? Your answer can be yes or no.

Dr. WATERMAN. I understand. I am not trying to evade your question.

Mr. FULTON. I am just trying to lay a groundwork because if the result would have been the same if you had known all of the facts, then there is something wrong either with the statute or with the procedures.

Dr. WATERMAN. I am not evading your question. I just want to lay the background for the answer. Those seem to be the facts.

Now, the affidavit seems to take care of the question of loyalty.

Mr. FULTON. With respect to the Yellin case, under the present procedures would the result be the same? I just ask you to say "Yes" or "No," and then I will develop what the procedures are.

Dr. WATERMAN. As we read the act, there is no other interpretation we can make unless any evidence we have bears on the ability of the candidate because those are the terms laid down.

Mr. FULTON. So that your complaint really is against the authorizing act because it forced you, in the Yellin case, to come to the same result regardless of your own discretion and judgment.

Dr. WATERMAN. I believe it would unless his ability were affected.

Mr. FULTON. Now, the next thing is: In the Yellin case, the procedures were followed correctly, were they not, by the administrative personnel involved both in the National Science Foundation through their employees and likewise through the volunteers who might have served as a panel on recommendations?

The procedures were correctly followed, so we are eliminating personnel error, aren't we?

Dr. WATERMAN. Yes, that is correct; the procedures were correctly followed.

Mr. FULTON. I am trying to limit it, not to have any other motive in my questions than to limit the thing we are thinking about.

Now, then, on the regulations of the National Science Foundation in respect to applications for fellowships, do you have a set of formal regulations?

Dr. WATERMAN. We have instructions that we give to the panelists that appraise the case.

Mr. FULTON. If you have those with you, I would like to have those put in the record at this point.

Mr. RUTTENBERG. I believe I have a set.

Mr. FULTON. We don't need to have them read at this time.

(The information requested is as follows:)

JANUARY 26, 1961.

Dr. M. H. TRYTTEN,

Director of Scientific Personnel, National Academy of Sciences, National Research Council, Washington, D.C.

DEAR DR. TRYTTEN: In order to aid the members of the graduate fellowship evaluation panels, we set forth herein certain points relative to the objectives and policies governing these awards. We suggest that this material be presented to the panel members in appropriate form prior to the beginning of the evaluation procedure.

I. GENERAL BACKGROUND

Graduate fellowships are intended to provide an opportunity for individuals who have demonstrated ability and special aptitude to undertake and complete graduate study in the sciences, mathematics, or engineering with the least possible delay.

Fellowships will be awarded to support individually planned programs of study in the mathematical, physical, medical, biological, and engineering sciences, including anthropology, psychology (excluding clinical psychology), and the following social sciences: Geography, mathematical economics, econometrics, de-

mography, information and communication theory, experimental and quantitative sociology, and the history and philosophy of science. Also included are interdisciplinary fields (such as meteorology, oceanography, biochemistry, biophysics, geochemistry, and statistics and statistical design) which are comprised of overlapping fields among two or more sciences. The fields of research and study covered by these awards are limited to those which conform to accepted standards of scientific inquiry by fulfilling the requirements of the basic scientific method as to objectivity, verifiability, and generality.

Fellowships will be awarded to support individually planned programs of study and/or research in one of the above indicated sciences, mathematics, or engineering at a level that is accepted by the fellowship institution toward an advanced degree in one of these science areas.

II. SPECIFIC CONSIDERATION

A. ELIGIBILITY

1. National Science Foundation graduate fellowships will be awarded on the basis of ability only to persons who will be citizens or nationals of the United States on or before March 1, 1961, and who have demonstrated ability and special aptitude for advanced training in the sciences, mathematics, or engineering. Awards will be made to individuals studying at the following graduate levels:

First year fellowships: Awards in this category will be made to students entering graduate school for the first time or those who will have completed less than 1 normal year of graduate study, as of the beginning of the tenure of their fellowships. College seniors who expect to receive a baccalaureate degree during the 1960-61 academic year, and other individuals who can produce evidence that they are acceptable as regular graduate students in an accredited nonprofit institution of higher learning, are eligible for such first year fellowships.

Intermediate fellowships: Awards in this category will be made to students who will have completed, as of the beginning of their fellowships, an amount of graduate training considered by the institutions at which they are in attendance to be a normal year of graduate study, but who will require more than 1 additional year to complete the requirements for a doctoral degree.

Terminal year fellowships: Awards in this category will be made to students who expect to complete the requirements for a doctoral degree within 1 calendar year from the date on which they enter on the tenure of their fellowships.

2. *Questionable eligibility.*—All applications have been administratively reviewed for the purpose of eliminating those found to be clearly ineligible for administrative reasons (e.g., noncitizenship or proposed field of study within a science area not supported by the foundation); such applications have not been referred to the panels. There remain, however, questions of eligibility on other applicants. These questions involve such points as whether the proposed activities program is properly to be regarded as "scientific study or scientific work" (from sec. 10 of the NSF Act), or is, in the judgment of the proposed fellowship institutions, at the graduate level in science, mathematics, or engineering. It is believed that these are questions more appropriately resolved by the evaluation panels than by administrative judgment.

B. CLINICAL ORIENTATION

Fellowships are not awarded for support of work directed solely toward the M.D. degree, or for support of residency training or similar work leading to qualification in a clinical field. However, individuals who hold a degree such as M.D., D.D.S., or D.V.M. and who desire to obtain further training for a career in research or teaching may apply provided they are otherwise eligible. There is no separate competition for individuals trained in these fields. Therefore, in order to receive full and favorable consideration, such applicants must present study and/or research plans of the same level of merit (and indicative of the same level of general competence) as those presented by applicants trained in the basic sciences (i.e.—at the graduate academic level.)

C. ACTIVITIES PROGRAM

1. *General.*—Applicants must submit an "Activities program"—an individualized plan of scientific study and/or scientific work carefully designed as a mechanism for increasing the competence of the applicant in science, mathe-

matics, or engineering. Applicants may submit activities programs covering a wide range of possibilities: advanced course work (whether or not leading to a degree), research, and individual study—any of these singly or in combination, as well as any other scientific activity which the applicant can demonstrate will enhance his effectiveness as a scientist, so long as the institution with which the fellow is affiliated considers his study or work to be at the graduate level.

National Science Foundation graduate fellows are required to devote full time to advanced scientific study and scientific work during the period of the fellowship award. Some applicants have proposed programs that include a limited amount of study at the undergraduate level, or of language study, or study in other nonscience areas. Insofar as the panelists feel that the amount and kind of proposed work not in the subject matter of science or not at the graduate level in science, is consonant with the program's objectives award may be made to individuals whose plans involve only a minor amount of training in nonscience or undergraduate-level areas, providing the activities program as a whole is focused on study or work in the sciences at the appropriate level.

2. *Social science fields.*—As noted in section I, fellowships will also be awarded in selected social science areas and in areas of convergence between the natural and social sciences as follows: Anthropology, geography, psychology (except clinical), mathematical economics, econometrics, demography, economic statistics, information and communication theory, experimental and quantitative sociology, and the history and philosophy of science. Applicants in the social science areas as listed above whose proposed activities programs are concerned primarily with scientific study and/or research and are judged to conform to accepted standards of scientific inquiry by fulfilling the requirements of the basic scientific method as to objectivity, verifiability, and generality, and who satisfy all other eligibility requirements, should have their applications considered by the evaluation panels. Political science as such is not supported. However, an application for a fellowship will be accepted for consideration where the study and/or research proposed by the applicant (whether it is to be undertaken in a department of political science or not) is in fact concerned largely with one of the disciplines currently supported in the program and meets the general scientific criteria of objectivity, verifiability, and generality.

3. *Tenure.*—The tenure of a National Science Foundation graduate fellowship is normally either 1 academic year of two semesters (or three quarters) or a full year consisting of the regular academic year plus a full summer session. The requested tenure should be considered as an integral part of the proposed program and one of the several elements in the evaluation process.

III. EVALUATION CRITERIA

According to section 10 of the National Science Foundation Act of 1950, as amended, selection of National Science Foundation fellows must be made "solely on the basis of ability." Panelists may of course use any available relevant information in arriving at their judgments of ability. Such matters as the excellence of proposed study and/or research programs, length of tenure, and institution(s) to be attended should be considered only to the extent that they indicate ability or lack thereof and should not be considered independently of the ability criterion.

Panelists should first make a basic determination as to whether an applicant is to be classified as a "finalist" or a "nonfinalist." A finalist is defined as an eligible applicant whom a single panelist would accept as a graduate student to work under him in science, mathematics, or engineering. All other applicants are nonfinalists.

IV. EVALUATION PROCEDURE

A. RENEWAL APPLICANTS

1. A number of applicants for graduate fellowships currently hold such fellowships. These applicants are classified as renewal applicants and will be evaluated by a separate subpanel within each field. The question may be raised by panel members as to the Foundation's policy regarding the number of times an individual may receive an NSF graduate fellowship. The Foundation has not established a limit on the number of times an individual may receive fellowship support in this program. The graduate fellowship program was designed to enable unusually able students to undertake and complete their graduate studies

with the least possible delay (see sec. I); therefore, these renewal applicants should be reviewed carefully to determine whether their rate of progress toward an advanced degree is consistent with that expected of NSF graduate fellows in their respective fields of science, mathematics, or engineering. Since these awards are made solely on the basis of ability, all evidence of ability, including the rate of progress toward a degree, should be carefully considered by the panelists. Stated another way, in order to receive favorable consideration, the renewal applicant's rate of progress, as evidenced by the application material, should be commensurate with that which the combined panel members would expect from an NSF fellow enrolled within their department at the same level of graduate study.

2. The subpanel members who review the renewal applicants will divide them into two quality groups as follows:

(a) Quality Group I-R (QG I-R) should consist of those renewal applicants to whom awards should be made. These renewal applicants should be selected on the basis of all the information available to the panelist based on whether or not the renewal applicant lived up to the promise indicated previously. If the renewal applicant, in the opinion of the panelist, has performed satisfactorily as a graduate student of fellowship caliber then the applicant should be placed in quality group I-R.

(b) All other renewal applicants should be placed in quality group IX. No renewal applicants in quality group IX are to be awarded honorable mention.

3. Fellows who change major fields during or at the end of their fellowship tenure (for example, from chemistry to mathematics), and who reapply in the new field for a fellowship should not be considered in the renewal group of fellowship applicants in their new fields and should be subject to and comply with all the requirements of first time applicants, including a determination of their level.

B. NEW APPLICANTS

The graduate applicants in this group should be listed in seven quality groups as follows:

1. Quality group I: Should consist of an alphabetical listing, irrespective of scientific field, of those finalists who, in the opinion of the evaluation panel, should definitely receive awards. It is hoped that this group will comprise approximately 6 percent of the total number of graduate applicants.

2. Quality group II: Arranged alphabetically. This group should include approximately 15 percent of the applicants at each of the three levels.

3. Quality groups III, IV, and V: Arranged alphabetically. These groups should contain approximately equal numbers of remaining finalists, considered by the panelists to be worthy of fellowship support.

4. Quality group VI: Arranged alphabetically. This group should consist of all remaining eligible applicants.

5. Quality group VII: Arranged alphabetically. Applicants considered by the panelists to be ineligible for the competition.

It is noted that evaluation panels should be requested to apply these quality group considerations to applicants both within a given field and a given year of study. Thus, for example, ideally it would be desirable to select the physics finalists in quality group I in such a way that this group would include 6 percent of the first year applicants, 6 percent of the intermediate applicants and 6 percent of the terminal year applicants in physics.

In assigning specific numbers and percentages of finalists to the various quality groups (as outlined above), it is assumed that there will be an essentially continuous distribution of ability level among the candidates, and that, therefore, the screening panels will be able to certify to the fact that the individuals chosen for a given quality group are all of substantially equal ability. If these assumptions should turn out to be incorrect, there may obviously occur certain concentrations of individuals of substantially equal ability which cannot be made to correspond to the numbers and percentages assumed for quality groups I and II. Should this situation occur, the panels should rely upon the primary criterion of substantially equal ability in grouping the finalists into quality groups, notwithstanding the numerical specifications given in the paragraphs above.

In determining the groupings of individuals, all possible effort should be made to insure comparability of ability levels between the various scientific fields and year levels. In other words, the individuals listed in first year physics, quality

group I, should be comparable, insofar as comparability is possible, with individuals listed in terminal year mathematics, quality group I; and a similar, generalized statement should be true for all other combinations of field-quality group pairs bearing the same quality group number.

Sincerely yours,

BOWEN C. DEES,

Assistant Director for Scientific Personnel and Education.

Dr. WATERMAN. And, of course, we also have the announcement of the fellowships which enables people to apply.

Mr. FULTON. The announcement contains the conditions.

(The announcement will be found on p. 69.)

Dr. WATERMAN. That is right.

Mr. FULTON. And the background information which is necessary for the applicant to go over to familiarize himself with the particular method of applying for such a grant.

Dr. WATERMAN. Yes.

Mr. FULTON. So that you have no criticism in the Yellin case of the type of invitation or inquiry that was put out for this particular type of person to apply.

Dr. WATERMAN. No.

Mr. FULTON. Then on the regulations, themselves, did they adequately cover the field so that the panel who made the Yellin choice could, within the area of their responsibility, make a proper judgment and a proper recommendation?

Dr. WATERMAN. They were carefully considered and they seemed to us to be adequate in the light of the act.

Mr. FULTON. We are narrowing where the trouble might be, to what might be a crux where we can then see how to proceed to repair the dike or the damage.

Then when you come to the people that are hired by the National Science Foundation on the Government payroll, separating the fact that somebody might have made a mistake which we have eliminated, was there any such thing in that group working for the National Science Foundation as an error of judgment, that is, that the judgment was not used reasonably under the circumstances either through not knowing all of the facts or through a failure of judgment so that it could be said to be a one-instance case?

Dr. WATERMAN. No, sir; there was nothing of that kind that I am aware of.

Mr. FULTON. On the development of the facts under your procedures, are your procedures in the National Science Foundation broad enough to give you a well-rounded view of the applicant who signs the written application?

Dr. WATERMAN. I believe we have a very thorough technique for that.

Mr. FULTON. Could you put a statement in the record later—we won't go into it today—of those techniques.

Dr. WATERMAN. All right, sir.

(The information requested will be found on p. 69.)

Mr. FULTON. In that regard, have these applicants been asked anything as to their ever having been arrested, accused of a crime, or committed a crime?

Dr. WATERMAN. We ask them no such question on the application blank.

Mr. FULTON. On these applicants who are connected with schools, have you any questions as to whether they have been expelled, suspended, or whether they are persons of good character within their school areas?

Dr. WATERMAN. We don't stress those points. The point is the ability of the candidates. Of course, there is one other fact that counsel calls my attention to. They have to be acceptable to the school that they apply for. The school has to accept them.

Mr. FULTON. The point is that Yellin had actually been suspended by the University of Illinois.

Dr. WATERMAN. So we understand, yes. He was reinstated.

Mr. FULTON. The question is whether it was simply a mistake in this one instance through the people not catching it who were to make the investigation of the facts, or is there a defect in the procedure that causes this to occur?

How did this escape the attention of the people who had the responsibility for a judgment in the Yellin case?

Dr. WATERMAN. We understand and we only just learned the fact that he was suspended and reinstated after a hearing at the university.

Mr. FULTON. Would you say that again? I missed the import of what you said.

Dr. WATERMAN. Well, we understand that the university did suspend the man.

Mr. FULTON. They expelled him, not suspended.

Dr. WATERMAN. I understand he was suspended. He had a hearing and was reinstated by the university and they are willing to accept him as a candidate, so our requirement that the university accept him has been satisfied.

Mr. FULTON. Did the University of Illinois disclose to you this past history either on request or voluntarily?

Dr. WATERMAN. No, we have no correspondence with the university as such only with those who recommended him. We don't ask the university for their official opinion.

Mr. FULTON. How do you get the record certified to you of academic accomplishment?

Dr. WATERMAN. We ask for his academic record from the school as one does commonly in such cases.

Mr. FULTON. But there is nothing other than just the marks, and the grades?

Dr. WATERMAN. That is correct, yes.

Mr. FULTON. With no characterization of the individual, whether he is stable or whether he has performed—

Dr. WATERMAN. Not that I am aware of. I don't know just what in particular cases the academic record would show. There was nothing that I know of in this one that was out of the ordinary.

It was just his academic record.

Mr. FULTON. Does the academic record come directly to you under certification by any official of the university? How do you prove authenticity?

Dr. WATERMAN. It comes, of course, from a duly accredited member of the university and is used by our panels in appraising the candidates, the panels that work for us.

Mr. FULTON. Have you any procedure for checking the loyalty of these applicants through any agency like the FBI or the Un-American Activities Committee staff?

Dr. WATERMAN. No; this, as far as we know, is not called for.

Mr. FULTON. Have you any procedure to find out on these applicants whether they have been associated with or allied with subversive agencies or groups or institutions?

Dr. WATERMAN. There is no evidence on this point in these letters in this case. This is possible, of course; it could happen, because a letter of recommendation says what the man wants to say about the candidate. It is confidential.

Mr. FULTON. On the question of motivation as to whether the person applying for a grant under this National Science Foundation authorization will be properly motivated toward his work and his scientific research and development, do you have any inquiry as to motivation?

Dr. WATERMAN. This is always a factor considered in the man's ability and promise. If he is not sufficiently motivated, this obviously is a reflection on his ability and the scientists who recommend him will certainly take that into account.

In scientific work several things are very important. One is that the man is properly motivated so that he will pay attention to his work. The second is whether he has the intellectual ability and the originality to succeed; he also must, as these people know very well, be very meticulous about his accuracy in his scientific work. He must be able to observe correctly and not draw unwarranted conclusions. He must not claim things which are not so. He must give credit to any colleagues or anyone else who has done research which he cites.

In all respects scientists are very critical of a man in these matters, and so if the man is not trustworthy, they would certainly be expected to bring this to our attention and he then would not be a satisfactory candidate.

Mr. FULTON. Do you have any procedures which would tell the National Science Foundation whether the applicant had signed a peace petition which is known to be Communist sponsored?

Dr. WATERMAN. We would have no evidence of that unless it were mentioned in these letters.

Mr. FULTON. For example, would you have any affirmative investigation which would check whether an applicant is a member of a youth organization associated with the Communist Party or has signed petitions sponsored by Communist organizations for ceasing nuclear and atomic testing?

Dr. WATERMAN. No; we would receive no information of that kind. The matter of investigation was considered by the Congress in the establishment of the bill originally and ruled out in favor of the affidavit; that is, the Foundation was to make no investigation.

Mr. FULTON. Now, on the evaluation of each applicant's qualifications, that is made by a panel of the National Academy of Sciences National Research Council. Could we have at this point in the record the National Academy of Sciences National Research Council, the members who made the appointment in the Yellin case put on record, their names, addresses, their occupations, and the institution with which they are connected and something of their background?

Likewise, on the panel of scientists appointed and having responsibility in the Yellin case, first how many were there, secondly, who are they; and thirdly, was any one of them connected with the University of Illinois?

Dr. WATERMAN. I would have to submit that for the record, Mr. Chairman. I wouldn't know that offhand.

(The information requested is as follows:)

NATIONAL SCIENCE FOUNDATION ENGINEERING EVALUATION PANEL FOR MARCH 1961
AWARDS, FEBRUARY 21, 22, 23, 1961

These members made up the National Science Foundation Graduate Fellowship Evaluation Panel for engineering applicants and were appointed by the National Academy of Sciences-National Research Council under contract to the National Science Foundation.

Chairman: Shepherd, Dr. W(illiam) G(erald), Dept. of Electrical Engineering, University of Minnesota, Minneapolis, Minn. Physics. Ft. William, Ont, Can, Aug. 28, 11, nat. 15; m. 36; c. 3. B.S.E.E, Minnesota, 33; Ph. D. (physics), 37. (Teaching fellow physics, Minnesota, 33-37; mem. tech. staff, Bell Tel. Labs, 37-47; Prof. Elec. Eng, Minnesota, 47- Physical Soc; Soc. Eng. Ed; Inst. Radio Eng. Non-linear circuits; electron tubes; micro-waves; nuclear physics.

Akers, Dr. William Walter, Dept. of Chemical Engineering, Rice Institute, Houston 1, Texas. Chemical Engineering. Graham, Texas, Dec. 31, 22; m. 47; c. 2. B.S. Texas Tech. Col. 43; M.S. Texas, 44; Ph. D. Michigan, 51. Chem. engr. Atlantic Ref. Co, 47; asst. prof. Chem. Eng. Rice Inst, 47-53., assoc. prof. 53-56, Prof. & Chmn. Dept. 56-, Consult. Hudson Eng. Corp; Air Prod, Inc; Am. Messer Co; Frick Co; Monsanto Chem. Co; Commercial Petrol & Transport Co. C. Eng. U.S.A. 41-43. A.A.; Chem. Soc; Inst. Chem. Eng. Heat transfer; reaction kinetics; thermodynamics.

Blackshear, Prof. Perry L(ynnfield), Jr, University of Minnesota, Minneapolis, Minn. Mechanical Engineering, Atlanta, Ga, July 19, 21; m. 48; c. 6. B.S. Ga. Inst. Tech, 43, M.S. 47; Ph. D. (mech. eng.), Case 56. Aeronaut. res. scientist, Nat. Adv. Cmt. Aeronaut. 47-57, head combustion dynamics sect. 57; assoc. prof. Mech. Eng, Minnesota 57-59. Prof. 59- U.S.A. 43-46. Rocket Soc; Combustion Inst. Fluid mechnics of chemically reacting systems as found in power and propulsion equipment.

Burden, Dr. Robert P(rentice), Rockefeller Foundation, 49 W. 49th St, New York 20, N.Y, Sanitary Engineering. Somerville, Mass, Jan. 26, 18; m. 41; c. 3. B.S. Tufts Col, 39; M.S. Harvard, 40, Wallace & Tiernan fel, 47-48, Sc.D. (sanit. eng), 48. Asst. Harvard, 40-41; asst. engr, special eng. div, Panama Canal, 41-42; instr. sanit. eng, Harvard, 42-45; sanit, engr, U.S. Pub. Health Serv, 45-47; Sanit. Engr, int. health div. Rockefeller Found, 48-53, div. of med. & pub. health, 53-55, Div. Agr. 55- Civilian with Office Sci. Res. & Develop, 44. Asn. Pub. Health, Spectroscopy of ammonia-chlorine dilute aqueous solutions; metabolism of activated sludge bacteria; explosive loadings of steel and concrete; strength characteristics of soils.

Churchill, Prof. Stuart W(inston), Dept. of Chemical Engineering, University of Michigan, Ann Arbor, Mich. Chemical Engineering. Inlay City, Mich, June 13, 20; m. 46; c. 3. B.S.E. (chem. eng), Michigan, 42, B.S.E (math), 42, M.S.F, 48, Ph. D. (chem. eng), 52. Tech. asst, petrol. ref, Shell Oil Co, Inc, 42-46; tech. supvr, electrochem. mfg, Frontier Chem. Co, 46-47; asst. chem. & metal, eng, Michigan, 48-49, res. assoc, 49-50, instr. Chem. Eng, 50-52, asst. prof, 52-55, assoc. prof. 55-57; Prof, 57- Chem. Soc; Soc. Mech. Eng; Soc. Eng. Ed; Inst. Chem. Eng; Combustion Ins. Radiation; heat transfer; combustion.

Deemer, Prof. Kenneth C(lark), University of Kansas, Lawrence, Kansas. Hydrodynamics. Leechburg, Pa, Sept. 12, 14; m.49; c.1. B.M.E., Ohio State, 38; Sc.D. Mass. Inst. Tech, 52. Process engr, Socony Vacuum Oil Co, 38-44; asst. plant supt, Rockwood & Co, 44-46; instr. applied mech, Ohio State, 46-48; res. assoc, dept. civil eng, Mass. Inst. Tech, 48-52; Prof. Eng. Mech & Chmn Dept, Kansas, 52- Soc. Mech. Eng; Soc. Eng. Ed; Soc. Civil Eng. Fluid mechanics; unsteady motion.

- Dietz, Dr. Albert (George Henry), Room 5-209, Massachusetts Institute of Technology, Cambridge 39, Mass. Engineering. Lorain, Ohio, March 7, 08; m. 36; c.2. A.B. Miami (Ohio), 30; B.S. Mass. Inst. Tech, 32, Sc.D (eng), 41. Designer & job foreman, Peter Dietz, Lorain, Ohio, 32-33; mill foreman, Nat. Tube Co, 33-34; asst, Mass. Inst. Tech, 34-36, instr, 36-41, asst. prof. struct eng, dept. bldg, eng. & construct, 41-45, assoc. prof. struct. design, 45-51, prof. struct. eng, 51-53, prof. Bldg. Eng. & Construct, 53- Sr. consult. engr, Forest Prods. Lab, U.S. Dept. Interior, 42. Mem. Eng. Ed. Mission, Japan, 51; bldg. res. adv. bd, Nat. Acad. Sci, Nat. Res. Council. With Office Sci. Res. & Develop, 44. Assoc. Soc. Civil Eng; assoc. Soc. Mech. Eng; Soc. Test. Mat. (Templin award); Soc. Eng. Ed; Forest Prods. Research Soc; Soc. Plastic Eng; Soc. Plastics Indust; fel. Am. Acad. Distribution around timber connectors; spacing of timber connectors; fatigue of plywood and wood adhesives; properties of compregnated wood; high frequency curing of wood-resin combinations; deterioration of adhesives; fundamental mechanical properties of plastics; solar energy for house heating.
- Fadum, Dr. Ralph E(igil), Dept. of Civil Engineering, North Carolina State College, Raleigh, N.C. Soils. Pittsburgh, Pa, July 19, 12; m. 39; c.1. B.S. Illinois, 35; M.S. Harvard, 37, Sc.D. (soil mech), 41. Asst. civil eng, Harvard, 35-37, instr. 37-41, faculty instr. 41-43; asst. prof. soil mech, Purdue, 43-45, assoc. prof, 45-47, prof, 47-49; Prof. Civil Eng. & Head Dept, N.C. State Col, 49- Consult, soils div, waterways exp. sta, Corps. Eng, U.S. Dept. Army, 54-, snow, ice & permafrost res. estab, 54-; eng. div, directorate installations, hqs, U.S. Dept. Air Force, 55- Chmn. panel soil mech, cmt. geophysics & geog, res. & develop. bd, U.S. Dept. Defense, 54-58; mem. adv. panel gen. scis, asst. secy. defense, 54-58; adv. panel eng. scis, Nat. Sci. Found, 54-57; nat. adv. cmt. road test, Am. Asn. State Hwy. Officials, hwy. res. bd. Nat. Acad. Sci. 56-; sci. adv. panel, U.S. Army, 59-; U.S. rep. int. cmt. nomenclature, Int. Soc. Soil Mech. & Found Eng, 57- Mem exchange mission, Am. Soc. Eng. Ed. U.S.S.R. 58. Soc. Civil Eng; Soc. Eng. Ed; Nat. Soc. Profnl. Eng. Soil mechanics; foundation engineering.
- Foster, Dr Mark G(ardner), Dept. of Electrical Engineering, University of Virginia, Charlottesville, Va. Physics. Winfield, Kans, March 17, 14; m. 39; c.3. A.B. Miami (Ohio), 35; Ph.D. (physics), Calif. Inst. Tech, 39. Asst. physics, Calif. Inst. Tech. 35-39; physicist, res. dept, Champion Paper & Fibre Co, 39-41; Naval Ord. Lab, Wash, D.C, 41-45; Curtiss-Wright Corp. 45; asst. head, eng. physics Dept, Cornell Aeronaut. Lab, 46-50, head, develop. div, 50-56; dir. res, Crosley Div, Avco Mfg. Corp, 56-57; prin. physicist, Cornell Aeronaut. Lab, 57-60; Willis Johnson Prof. Elec. Eng. & Chmn. Dept, Virginia, 60- A.A.; Phys. Soc; Inst. Aeronaut. Sci. Low temperatures; high vacuum; applied analytical dynamics; underwater acoustic equipment; radio telemetering; physical optics; guided missiles.
- Harman, Prof. Willis W(alter), Dept. of Electrical Engineering, Stanford University, Stanford, Calif. Electrical Engineering. Seattle, Wash. Aug. 16, 18; m. 41; c. 3. B.S., Washington (Seattle), 39; cert. U.S. Navy Postgrad. Sch, 45; M.S. & Ph.D. (elec, eng), Stanford, 48. Res. Assoc, Stanford, 46-48, fel. Nat. Res. Council, 48, asst. prof. Elec. Eng, 48-49, assoc. prof, Florida 49-52, Stanford, 52-57, prof, 57-Fulbright vis Iectr. Royal Tech. Univ, Copenhagen, Denmark, 59. U.S.N.R., 41-45, Lt. Comdr, Sr. mem. Inst. Radio Eng. Microwaves tubes; communication theory; engineering education.
- Morse, Prof. Reed F(ranklin), Dept. of Civil Engineering, Kansas State University, Manhattan, Kans. Civil Engineering. Fredericksburg, Iowa, April 26, 98; m. 24; c.1. A.B, Cornell Col, 21; B.S. Iowa State, 23; M.S., Kansas State, 33, Ph.D. (structures), 41. Instr. civil eng, Kansas State, 23-26; res. engr. in charge construct. grading, culverts & bridges, Kans. State Hwy. Cmn, 26-27, asst. div. engr. in charge rd. maintenance, 27-29; instr. Civil Eng, Kansas State, 29-34, asst. prof. 34-42, assoc. prof. 42-47, Prof & Head Dept. 47- Soc. Civil Eng; Soc. Eng. Ed. Effect of alternate wetting and drying on compacted soil; surveying; stress analysis.
- Othmer, Prof. Donald F(rederick), Dept. of Chemical Engineering, Polytechnic Institute of Brooklyn, Brooklyn 1, N.Y. Chemical Engineering. Omaha, Nebr, May 11, 04; m.50. B.Ch.E. Nebraska, 24; Michigan, 24-27, M.Ch.E, 25, Ph.D. (chem. eng.), 27. Chemist, Cudahy Packing Co, 24; chem. & develop. engr. Eastman Kodak Co. N.Y. & Tenn. Eastman Co. iv, 27-30; instr. Chem. Eng. Polytech. Inst. Brooklyn, 32-33, asst. prof. 33-37, Prof. & Head Dept. 37- Sr. gas officer, Brooklyn, N.Y. 43-45; Am. Swiss Found. Sci. Ex-

change, Inc. lectr. Can, 50, Japan, 50-58, India, 53-55, Germany, 58-61. Consult, Govt. P.R., 38-39; Inter-Am. Develop. Cmn., 42; Inst. Develop. Indust, Columbia, 43; Prov. Bombay, 50; dept. food & agr, Govt. India, 51; Govt. Union Burma, 52-53; UN Korean Reconstruct. Agency, 53-; Govt. Chile, 54-55; Govt. Nicaragua, 61- Co-editor, 'Encyclop. Chem. Tech'; ed, 'Fluidization.' Am. Del. Cent. Celebration, Soc. Civil Eng, France, 48. Hon. prof, Concepcion Univ, Chile, 51. Consult. Chem. Warfare Serv, U.S. Army, 42, 52-; War Prod. Br, 42; special serv. div, U.S. Dept. Navy, 48-; Ord. Corps, 51-; U.S. Dept. State, 52-53; U.S. Dept. Interior, 53-; U.S. Dept. Health, Ed. & Welfare, 61-Dir. Eng. Joint Council, 57-58. A.A.; Chem. Soc.; Soc. Chem. Indust; Soc. Mech. Eng; Soc. Eng. Ed. (Barber-Coleman award, 58); fel. Inst. Chem; Inst. Chem. Eng. (Tyler award, 59); Inst. Consult. Eng. Chemical engineering; heat transfer; distillation; evaporation; physical chemistry; correlation methods for presenting data in thermodynamics and physical chemistry; vapor-liquid and other phase equilibria; industrial chemistry; wood chemistry; plastics manufacture; solvent recovery; petroleum and petrochemicals; industrial microbiology; synthetic fibers; sugar refining; refrigeration; zinc refining; pulping liquors recovery.

Seely, Dr. Samuel, Dept. of Electrical Engineering, Syracuse University, Syracuse, N.Y. Physics, Electrical Engineering. New York, N.Y. May 7, 09; m. 51; c. 2. E. E. Polytech, Inst. Brooklyn, 31; Morton scholar, Stevens Inst. Tech. 32; M.S. 32; Ph. D. (physics), Columbia, 36. Lecturer physics, Polytech. Inst. Brooklyn, 35; instr. and asst. prof. elec. eng, City Col. 36-46; assoc. prof. electronics, grad. sch. U.S. Naval Acad, 46-47; Elec. Eng. Syracuse, 47-. Chairman Dept. 51-. Staff mem, radiation lab, Mass. Inst. Tech, 41-46. Civilian with Office Sci. Research & Development; research & develop. board, Dept. of Defense, 50; consultant, office chief signal officer, 52-53. Physical Soc; Inst. Radio Eng; Inst. Elec. Eng; Soc. Eng. Ed. Diamagnetism; nuclear physics; electronic circuits; microwave and longwave antennas.

REVIEW PANEL

The following panel chairmen met on February 20 and February 24, 1961, and reviewed the evaluation procedures used by all panelists:

Anthropology and psychology—Grant, Prof. David A(lexander), Dept. of Psychology, University of Wisconsin, Madison, Wis. Experimental Psychology. Des Moines, Iowa, May 17, 16; m.38; c.3. B. A. Iowa; M.A. Wisconsin, 39; Ph. D. Stanford, 41. Instr. Psychol, Wisconsin, 41-48, Prof, 48-, chmn. dept, 50-54. Summers, lectr, Northwestern, 48; Stanford, 49; Columbia, 53; California, Los Angeles, 55; Southern California, 55. Vis. prof, California, 59-60. Consult, U.S. Air Force, 54-58. Mem, Nat. Res. Council, 56-58. Social psychologist, res. br. morale servs. div. U.S. War Dept, 44. Psychomet. Soc; Psychol. Asn; Statist. Asn; Inst. Math. Statist. Conditioning and learning; problem solving; experimental design and analysis.

Biological Sciences—Carlson, Dr. Loren D(aniel), Dept. of Physiology, University of Washington, Seattle 5, Wash. Physiology. Davenport, Iowa, May 5, 15; m. 41; c. 4. B.S., St. Ambrose Col. 37; Ph. D. (7sol), Iowa, 41. Research assoc. gen. physiol, Iowa, 41-42, instr. animal biol, Washington (Seattle), 46, asst. prof, Dept. Physiol, 45-49, assoc. prof, 49-55; Prof, 55-, asst. dean med. sch, 48-49, acting asst. dean, 53-54. A.A.F, 42-46, Maj. A.A.; Soc. Zool; Physiol. Soc; Soc. Exp. Biol; Aero Space Asn; Int. Soc. Bioclimatol. Environmental physiology; aviation physiology; respiration and metabolism.

Chemistry—Bender, Dr. Paul J. University of Wisconsin, Madison 6, Wis. Physical Chemistry. Mansfield, Ohio, Nov. 20, 17; m. 43. B.S., Yale, 39, Ph. D. (phys. chem), 42. Phys. chemist, Office Sci. Res. & Develop. proj, Yale, 42; instr. Phys. Chem, Wisconsin, 42-45, asst. prof, 45-48, assoc. prof, 48-55, Prof, 55- Chem. Soc. Thermodynamic properties of solutions; Raman spectroscopy; vapor pressures for liquids; nuclear magnetic resonance spectroscopy.

Earth Sciences—Kay, Prof. (George) Marshall, Dept. of Geology, Columbia University, New York 27, N.Y. Geology. Paisley, Ont. Can, Nov. 10, 04; nat; m; c.4. B.S. Iowa, 24, M.S. 25; Chicago, 24; Ph.D. (geol), Columbia, 29. Asst. curator paleont, Columbia, 25-27. lectr. Geol, Barnard Col, 27-30, instr. 30-31, univ, 31-37, asst. prof, 37-42, assoc. prof, 42-44, Prof, 44-, adminstr, div. war res, 44-46, exec. officer, dept. geol, 53-56, chmn, faculty pure sci, 56-59. Geologist, N.Y. State Mus, 40-42; U.S. Geol. Sur, 43-45.

A.A.; fel. Geol. Soc; Soc. Econ. Paleont. & Mineral; fel. Paleont. Soc. (v. pres, 45); Asn. Petrol. Geol; fel. N.Y. Acad. (Kunz prize, 41; v. pres, 43-45); Paleont. Soc. Japan; Asn. Geol. Argentina. Stratigraphy; Ordovician stratigraphy of eastern North America; history and classification of geosynclines; Ostracoda; Ottawa-Bonnechere graben; paleozoic of central Nevada.

Engineering—Shepherd, Dr. W(illiam) G(erald)

February 20, 1961

See biography given above.

Burden, Dr. Robert P (rentice)

February 24, 1961

See biography given above.

Mathematics—Bing, Prof. R. H, Dept. of Mathematics, University of Wisconsin, Madison, Wis. Mathematics. Oakwood, Texas, Oct. 20, 14; m; c.4. B.S, Southwest. Texas State Teachers Col, 35; M.Ed, Texas, 38, Ph.D. (math), 45. Instr. pure math, Texas, 43-45, asst. prof, 45-47; Math, Wisconsin, 47-49, assoc. prof, 49-52, Prof, 52- Vis. prof, Virginia, 49-50, Mem. Inst. Adv. Studies 57-58. A.A. (v. pres, 59); Math. Soc; Math. Asn. Topology; analysis; continuous curves; metric spaces; Euclidean spaces.

Physics and Astronomy—Fowler, Dr. Richard G (ildart), Dept. of Physics, University of Oklahoma, Norman, Oklahoma. Physics. Albion, Mich, June 13, 16; m.39; c.4. A.B, Albion Col, 36; M.S, Michigan, 39, Ph.D. (physics), 41. Asst. Dow Chemical Co, Mich, 36-38; Michigan, 38-40, res. physicist, 41, 42-46; instr. Physics, N.C. State Col, 41-42; asst. prof, Oklahoma, 46-49, assoc. prof, 49-56, prof, 56-, chmn. dept, 55-59. Guggenheim fel, 52. With Office Sci. Res. & Develop, 44. A.A.; fel. Phys. Soc; Soc. Eng. Ed. Ultra-violet spectrochemical analysis; organic structure determination by infrared spectra; plasma physics and electrically generated shock waves; plasma driven shock tubes; purification of graphite; mechanisms involved in the production of radiation in the low voltage arc.

Social Sciences—Espenshade, Dr. Edward B (owman), Jr, Dept. of Geography, Northwestern University, Evanston, Ill. Geography. Chicago, Ill, Oct. 23, 10; m.39; c.2. B.S, Chicago, 31, M.S, 32, Ph.D. (geog), 44. Jr. geologist, Ill. Geol. Surv, 32-33; curator maps, Chicago, 33-40; instr. geog, 37-42, col. adviser, 40-42; for. map ed, Army Map Serv, 42-44; consultant, intel. div, C.Eng. U.S.A, 44-45; asst. prof. Georg, Northwestern, 45-46, assoc. prof, 46-54, Prof, 54- Cartog. consultant, Rand McNally & Co, 46- Ed, 'Goode's World Atlas' AAG; Fel. AGS; A. Cong. Surv. & Map; Geophys. U; Far E.A.; A.I.Pac. Rel. Cartography; map intelligence; geography of southern Asia. "Urban Development at Upper Rapids of the Mississippi River."

Sources: American Men of Science, 10th edition, 1961; American Men of Science, 9th edition, 1955 and 1956.

Mr. FULTON. On this panel of scientists to assist the National Academy of Science in the evaluation of applicants, is there a decision, a recommendation, or is it a decision of the National Science Foundation, as to the granting of the money to this applicant?

Dr. WATERMAN. What the Academy panel does is to appraise the ability of the candidates and then put them in order of excellence as they see them and then submit this to us. We make the decision.

Mr. FULTON. All right, so there was a report then submitted to you by the panel of scientists appointed by the National Academy of Sciences National Research Council for the Yellin case. Would you later submit that to us for the record?

Dr. WATERMAN. All right.

(The information requested is as follows:)

JULY 18, 1961.

No specific report was made on Mr. Yellin. He was included on the list of persons contained in quality group II. All persons in quality groups I and II were offered fellowships.

Mr. FULTON. Then on the amount of work that has been done in providing a basis for a decision for this panel, will you likewise have submitted to us either by the panel from its records, or by each of these persons, how broad an area of reference they went into in order to

make up their judgment in the Yellin case? Will you give us the method of decision?

Dr. WATERMAN. Yes, sir. You have the instructions that pertain—

Mr. FULTON. But I want in the Yellin case what they actually did in accordance with the instructions.

Dr. WATERMAN. That is a little difficult because there are so many candidates I am not sure that they could recall the case exactly. We will do what we can.

Mr. FULTON. Fortunately the many candidates is no reason for lessening the requirements.

Dr. WATERMAN. Exactly, but I am sure the panel would say these candidates were all treated in accordance with the instructions.

Mr. FULTON. We need that of record, of course. We have instructions to them and now we want to see what they did in this case and I think your counsel would advise you that it is necessary for us to build up the method of decision.

Dr. WATERMAN. Yes, surely. If you like, I can give you a brief summary of what they do now.

Mr. FULTON. Well, I am making a record here that your counsel can help you fill in.

(The information requested is as follows:)

NATIONAL SCIENCE FOUNDATION GRADUATE FELLOWSHIP PROGRAM, FISCAL YEAR 1961

The announcements of the reopening of competition for National Science Foundation graduate fellowships for academic year 1961-62 were released in early October 1960. More than 20,000 announcements (attachment A) were mailed to colleges and universities throughout the United States, and to other interested organizations and persons. Upon request, application materials were mailed out by, and returned to, the National Academy of Sciences-National Research Council, Washington, D.C. These materials, in 1961, consisted of an announcement (NSF publication 60-50) an office card (NSF form 9C-53A), an application form (NSF form 9C-50A), an affidavit and oath (NSF form 9C-54AB), a proposed plan of research (NSF form 9C-60A), a verification of level (NSF form 9C-62A), a rank in college or university class (NSF form 9C-64A), several grade report forms (NSF 9C-61A), four reference reports on applicant (NSF form 9C-57A), a special application for the January 21, 1961 graduate record examinations (NSF form 9C-52A), a request for report of previous graduate record examinations scores (NSF form 9C-81A), an instruction sheet, and several return envelopes.

Each applicant was instructed to take the graduate record examinations, administered by the Educational Testing Service, Princeton, N.J., on a worldwide basis on January 21, 1961—unless he had taken the required examinations recently and could therefore have the scores from such earlier administration of the examination submitted in behalf of his application. These examinations consist of an aptitude test, both verbal and quantitative, and an advanced achievement test, which was offered in the following fields of study for 1961 NSF graduate applicants: Biology, chemistry, physics, psychology, mathematics, engineering, and geology. Applicants applying for awards in areas of study for which no advanced achievement test was offered took only the aptitude test of the graduate record examinations.

The raw scores, scaled scores, and percentile rankings of NSF applicants in the graduate fellowship competition were reported by the Educational Testing Service to the National Science Foundation on February 13, 1961. In the aptitude test of the graduate record examinations, the percentile ranking of each applicant in the verbal portion of the test reflected the standing of that applicant as compared to all other applicants taking the verbal test; the same was true of the quantitative portion of the aptitude test. The percentile ranking of an applicant in the advanced achievement test of the graduate record examinations

reflected his standing in comparison to the standing of all other applicants applying in the same field of study. These scores were made a part of the application of the candidates for NSF graduate fellowships.

The competition for academic year 1961-62 NSF graduate fellowships closed on January 6, 1961. In this particular competition, 4,875 applications were received.

To evaluate these applicants on the basis of ability, the National Academy of Sciences-National Research Council, under contract with the National Science Foundation, selected 82 panelists from a list of scientists, mathematicians, and engineers compiled by the divisions of the National Research Council. The invitation to serve and the appointment of panelists was made by Dr. Detlev Bronk, President of the National Academy of Sciences.

The panelists assembled in Washington, D.C., at the National Academy of Sciences, 2101 Constitution Avenue NW., on February 20-24, 1961. The National Science Foundation had provided the National Academy of Sciences-National Research Council a letter containing instructions as to how the evaluation should be accomplished so as to meet the specifications of the NSF Act of 1950. (The House Committee on Science and Astronautics has been supplied a copy of this letter, dated January 26, 1961.) In turn, the National Research Council, on the basis of the letter of instructions, provided them by the National Science Foundation, prepared instructions for the panelists. (A copy of these instructions of the National Research Council has been supplied the House Committee on Science and Astronautics.)

In the graduate program, the panels are organized by disciplines. In the 1961 competition, these disciplines were: Anthropology and psychology, biological sciences, chemistry, earth sciences, engineering, mathematics, physics and astronomy, and social sciences. The members of the engineering panel in 1961 who evaluated all engineering applications, including Edward L. Yellin's, were:

- W. G. Shepherd, Chairman, professor and head, department of electrical engineering, University of Minnesota, Minneapolis, Minn.
- W. W. Akers, professor of chemical engineering, Rice University, Houston, Tex.
- Perry L. Blackshear, Jr., professor, department of mechanical engineering, University of Minnesota, Minneapolis, Minn.
- Robert P. Burden, adviser to the dean of engineering and applied physics, Harvard University, Cambridge, Mass.
- Stuart W. Churchill, professor, department of chemical and metallurgical engineering, University of Michigan, Ann Arbor, Mich.
- Kenneth C. Deemer, professor and chairman, department of engineering mechanics, University of Kansas, Lawrence, Kans.
- Albert G. H. Dietz, professor of building engineering, department of civil and sanitary engineering, Massachusetts Institute of Technology, Cambridge, Mass.
- R. E. Fadum, head, department of civil engineering, North Carolina State College, Raleigh, N.C.
- Mark Foster, head, department of electrical engineering, University of Virginia, Charlottesville, Va.
- Willis W. Harman, professor, department of electrical engineering, Stanford University, Stanford, Calif.
- Reed F. Morse, professor and head, department of civil engineering, Kansas State University, Manhattan, Kans.
- Donald F. Othmer, professor and head, department of chemical engineering, Polytechnic Institute of Brooklyn, 333 Jay Street, Brooklyn, N.Y.
- Samuel Seely, professor, department of electrical engineering, University of Wyoming, Laramie, Wyo.

Each disciplinary panel reviewed all the applications in those fields of study which properly belonged in the area it represented. In the case of applicants requesting a renewal of a current NSF graduate fellowship, the panel determined on the evidence submitted by the fellow's institution and professors (principally grade reports and letters of reference) whether the current NSF graduate fellow was making the progress to be expected of a graduate student of high ability, and the panel then recommended on the basis of this review either renewal or nonrenewal of the award at the end of the current fellowship. In considering applicants who did not hold a current NSF graduate fellowship, the procedure differed. On the basis of grade reports, a rank-in-class report, graduate record examinations scores and percentiles, reference reports, and the

applicant's statement concerning purpose of research and study, each panel placed the applicants it evaluated into one of seven quality groups (as defined in the National Science Foundation's letter of instruction to the National Academy of Sciences-National Research Council), according to the panel's judgment of the ability of each applicant as determined from all available evidence.

Each application was carefully reviewed by at least three panelists. Applicants were evaluated in terms of ability in comparison with applicants at the same level of study; that is, a first-year graduate student was evaluated on ability by comparing him with other first-year graduate student applicants; intermediate-year students were compared with each other in arriving at an evaluation of ability; and the same was true of terminal-year students. Each panel in plenary session then prepared its final report which listed applicants in quality groupings. For instance, all engineering panelists participated in arranging the final ranking and recommendations for engineering applicants.

On February 24, 1961, after the disciplinary panels had completed their deliberations, a special panel consisting of representatives from all of the disciplinary panels reviewed the final reports of the various panels and compiled an overall list of all applicants by quality groups. This review panel is normally composed of the chairmen of the disciplinary panels. In 1961, the members of the review panel were:

David A. Grant, professor of psychology, University of Wisconsin.

Loren D. Carlson, professor and chairman, Department of Physiology, University of Kentucky College of Medicine.

Paul Bender, professor of chemistry, University of Wisconsin.

Marshall Kay, professor of geology, Columbia University.

Robert P. Burden, adviser to the dean of engineering and applied physics, Harvard University.

R. H. Bing, Department of Mathematics, University of Wisconsin.

R. G. Fowler, professor of physics, University of Oklahoma.

Edward B. Espenshade, Jr., Department of Geography, Northwestern University.

Neither the Engineering Panel, nor the Review Panel, submitted any special comments on the application of Edward L. Yellin, who on the basis of the evidence regarding his ability, was placed in quality group II.

The final report of the review panel was made to the National Research Council on February 24, 1961. The National Academy of Sciences-National Research Council then transmitted to the National Science Foundation the results of panel evaluation of the applicants in the graduate competition (attachment B). These results listed the new applicants by name in quality groups I to VII, and in the case of renewal applicants, in two groups, as defined in the letter of instructions. In the 1961 competition, there were 749 renewal applicants, and of this number, 591 were recommended for renewal of an award, and 158 were not. Of the 4,126 other applicants, 305 were placed in quality group I, 607 in group II, 783 in group III, 946 in group IV, 826 in group V, and 659 in groups VI and VII. These results are given in the accompanying chart (attachment C.)

On the basis of these recommendations by the evaluation panels, the National Science Foundation selected the award winners in compliance with section 10 of the National Science Foundation Act of 1950 (Public Law 507), as amended. Section 10 reads as follows:

"The Foundation is authorized to award, within the limits of funds made available specifically for such purpose pursuant to section 17, scholarships and graduate fellowships for scientific study or scientific work in the mathematical, physical, medical, biological, engineering, and other sciences at appropriate non-profit American or non-profit foreign institutions selected by the recipient of such aid, for stated periods of time. Persons shall be selected for such scholarships and fellowships from among citizens and nationals of the United States, and such selections shall be made solely on the basis of ability; but in any case in which two or more applicants for scholarships or fellowships, as the case may be, are deemed by the Foundation to be possessed of substantially equal ability, and there are not sufficient scholarships or fellowships, as the case may be, available to grant one to each of such applicants, the available scholarship or scholarships or fellowship or fellowships shall be awarded to the applicants in such manner as will tend to result in a wide distribution of scholarships and fellowships among the States, territories, possessions, and the District of Columbia."

In the 1961 competition, the Foundation determined that in addition to renewal awards, it could with the funds available for the graduate fellowship program, make awards to all new applicants placed in quality groups I and II by the evaluation panels, and to 34 applicants in quality group III. These latter awardees were selected on the basis of geographical distribution of awards among the States, territories, and District of Columbia, as specified in section 10 of the National Science Foundation Act of 1950, as amended.

After the roster of the successful applicants to whom awards were to be offered had been prepared, the affidavit and oath submitted by each prospective awardee was checked. Awards were offered on March 15, 1961, to those persons who had complied with the requirements of section 16(d) of the National Science Foundation Act of 1950, as amended, relating to the affidavit and oath.

Following a review of the program and of the evaluation and selection procedures by the Assistant Director for Scientific Personnel and Education Division of the National Science Foundation, the Head, Fellowships Section, and the program director for the graduate fellowship program meeting together, a memorandum was prepared from the Assistant Director, S.P. & E. Division to the Associate Director (Educational and International Activities) of the Foundation recommending 1,537 individuals for graduate fellowship awards. The Associate Director, after reviewing this memorandum with the staff members, recommended the individuals named in the roster to the Director of the Foundation, who approved the list of persons recommended, in accordance with the authority delegated to him by the National Science Board (attachment D).

On March 15, the Foundation advised all applicants in the graduate program, by mail, of the outcome of the 1961 competition. Award letters were sent to the 1,537 individuals selected as described above; "Honorable Mention" letters were sent to 1,695 individuals, consisting of the remaining applicants placed in quality group III and those who had been placed in quality group IV. The remaining applicants, including the nonawardees among the renewal applicants, were notified that they had not received an award. (These letters are attachments E, F, and G.)

At the same time the press release, which lists by State of permanent residence the awardees and those receiving honorable mention, was delivered to the House and Senate post offices for distribution to every Member of the Congress and to the standing committees. A few days later, the Foundation distributed the press release throughout the United States to newspaper, colleges, and universities, and other interested persons (attachment H). The names of some applicants receiving honorable mention, by their request, were not included in the press release.



Attachment A
NATIONAL SCIENCE FOUNDATION

GRADUATE FELLOWSHIPS

CLOSING DATE FOR RECEIPT OF
APPLICATIONS: JANUARY 6, 1961
ANNOUNCEMENT OF AWARDS
TO BE MADE ON MARCH 15, 1961

apply to:

THE FELLOWSHIP OFFICE,
NATIONAL ACADEMY OF SCIENCES
NATIONAL RESEARCH COUNCIL,
2101 CONSTITUTION AVENUE, N.W.,
WASHINGTON 25, D. C.

Attachment A

NATIONAL SCIENCE FOUNDATION
ANNOUNCEMENT OF GRADUATE
FELLOWSHIPS IN SCIENCE

AS ONE means of promoting the progress of science, the National Science Foundation plans to award approximately 1200 graduate fellowships to individuals planning to undertake graduate study in the sciences during the 1961-1962 academic year. Awards will be announced on March 15, 1961. Selection of persons for fellowships will be made from among citizens or nationals of the United States solely on the basis of ability, in accordance with Section 10 of the National Science Foundation Act of 1950, as amended. These fellowships will be awarded in the mathematical, physical, medical, biological and engineering sciences, including anthropology, psychology (excluding clinical psychology), and the following social sciences: geography, mathematical economics, econometrics, demography, information and communication theory, experimental and quantitative sociology and the history and philosophy of science. Fellowships are also awarded in interdisciplinary fields which are comprised of overlapping fields among two or more sciences, such as meteorology, oceanography, biochemistry, biophysics and geochemistry. The fields of research and study covered by these awards are limited to those which conform to accepted standards of scientific inquiry by fulfilling the requirements of the basic scientific method as to objectivity, verifiability and generality. Awards are not made to individuals for study in a program leading to the M.D. degree nor for a course of study designed to prepare them for careers in medical practice or other clinical fields; however, applications will be accepted from those who intend to obtain advanced training in one of the medical sciences directed toward a career in research or teaching.

Eligibility

National Science Foundation graduate fellowships will be awarded on the basis of ability to persons who are citizens or nationals of the United States as of March 1, 1961, and who have demonstrated ability and special aptitude for advanced training in the sciences. Awards will be made to individuals studying for either masters' or doctoral degrees under one of the following levels:

First Year Fellowships: Awards in this category will be made to students entering graduate school for the first time or those who will have completed less than one nor-

mal year of graduate study, as of the beginning of the tenure of their fellowships. *College seniors who expect to receive a baccalaureate degree during the 1960-1961 academic year and other individuals who can produce evidence that they are acceptable as regular graduate students in an accredited nonprofit institution of higher learning are eligible for such first year fellowships.*

Intermediate Fellowships: Awards in this category will be made to students who will have completed, as of the beginning of their fellowships, an amount of graduate training considered by the institutions at which they are in attendance to be a normal year of graduate study, but who will require more than one additional year to complete the requirements for a doctoral degree.

Terminal Year Fellowships: Awards in this category will be made to students who expect to complete the requirements for a doctoral degree within one calendar year from the date on which they begin the tenure of their fellowships.

Fellowship Activities

National Science Foundation Fellows will be required to devote full time to advanced scientific study or scientific research during the period of the fellowship award. A Fellow may not receive remuneration from another fellowship, scholarship, or similar award or Federal grant or contract during the tenure of the fellowship.

The Foundation shares the belief of many scientists that experience in teaching (and/or related activities) contributes to the graduate training process and is highly desirable for most graduate students. Therefore, the Foundation urges its Fellows to give full and serious consideration to any teaching opportunities of an appropriate nature that may arise. The Fellow may accept teaching assignments of an appropriate nature without approval from the Foundation if the Fellow's institution considers such participation contributory toward his scientific and academic training and the Fellow receives no remuneration. This teaching assignment, however, must be only a *minor* part of the Fellow's planned academic program. Except in special cases (where adequate justification is submitted to show that exceptional circumstances exist), Fellows are not allowed to accept remuneration for teaching or other duties carried out during fellowship tenure.

The results of research carried out by a Fellow may be made available to the public

by ordinary means without restriction except as is required in the interest of national security.

Application and Award Dates

Applications for graduate fellowships must be received in the Fellowship Office of the National Academy of Sciences—National Research Council by **January 6, 1961**. Fellowships will be awarded by the National Science Foundation on March 15, 1961.

Selection

Selection of Fellows will be based on academic records, recommendations regarding each applicant's ability, *scores achieved in examinations designed to test scientific aptitude and achievement, and other evidence of potential scholarship. Instructions concerning these examinations are contained in the application materials. The applicants must make the necessary arrangements by January 6, 1961.*

Evaluation of each applicant's qualifications will be made by panels of scientists appointed by the National Academy of Sciences—National Research Council which assists the National Science Foundation in the evaluation of applicants. Final selection of Fellows will be made by the National Science Foundation.

All applicants will be notified by letter of the disposition of their applications on March 15, 1961.

An Honorable Mention list containing the names of applicants for graduate fellowships considered worthy of support but to whom awards could not be made will also be distributed on that date.

Conditions of Appointment

Applicants must submit an application form, complete copies of transcripts of their college and university records, and a plan of study for advanced training or research. The affidavit and loyalty oath required by Section 16(d) of the National Science Foundation Act of 1950, as amended, 42 U.S.C. 1874(d) must constitute part of the application.

Tenure

The tenure of a graduate fellowship may be selected by the Fellow to include either one regular academic year of two semesters

(or three quarters) or a full year consisting of the regular academic year plus a full summer session. Fellows electing the longer tenure and studying at institutions where the summer session is divided into two terms will be expected to attend each of the terms during the tenure of their awards. (It is possible for Fellows attending institutions having no formal summer sessions to make special arrangements for supervised study or research at their institutions or elsewhere.) Graduate Fellows may enter on the tenure of their awards any time after June 1, 1961, but must begin their fellowship activities no later than the beginning of the 1961-1962 academic year at the institution of the Fellow's choice.

After an appointment is made, a major change in course of study, tenure, or institution to be attended by a Fellow, requires prior approval of the National Science Foundation. It is expected that a Fellow shall carry out his proposed program of study and/or research. Major departures therefrom will be approved only for compelling reasons.

The granting of a fellowship implies no commitment about its renewal. Present Fellows will receive special instructions concerning the procedure to be followed in applying for a renewal of their current awards.

Location of Work

In accordance with the provisions of the National Science Foundation Act, fellowships are awarded for scientific study or scientific work at any appropriate nonprofit American or nonprofit foreign institution. An "appropriate institution" in this program is normally considered to be an institution of higher education.

The Foundation does not require that the Fellow be physically located at his institution at all times. Thus a Fellow may study or engage in research or field work elsewhere during part (in rare cases, during all) of his tenure if, in the judgment of the faculty of his fellowship institution, such a procedure will further the Fellow's education. Irrespective of his physical location the Fellow will be regarded by the Foundation as being affiliated with his fellowship institution and studying under the direction of its faculty.

Since the law requires the Foundation to select its Fellows solely on the basis of ability, an applicant's choice of graduate institution is not considered in any substantive way in the selection of fellowship recipients.

Stipends and Allowances

Annual stipends for NSF graduate fellowships will vary with the category of the award:

The annual stipend for First Year Fellows will be \$1,800.

The annual stipend for Intermediate Fellows will be \$2,000.

The annual stipend for Terminal Year Fellows will be \$2,200.

The annual stipend will be made available to Fellows who elect the full year (12 months) option. Fellows electing an academic year (9 months) award will receive nine-twelfths of the annual stipend. Married Fellows normally will be provided a dependency allowance of an additional \$500 plus \$500 for each dependent child. As in the case of the stipend, these allowances will be reduced to nine-twelfths of the annual figure for Fellows electing academic year awards. A limited allowance will be paid to aid in defraying the Fellow's cost of travel to his institution to enter on the tenure of his fellowship. Tuition and certain fees assessed and collected by the Fellow's affiliated institution from individuals of similar academic

standing will be paid by the National Science Foundation. An additional allowance is available upon request up to \$250 for the purchase of *special* equipment and materials or for *unusual* research expenses incurred during the fellowship tenure. It is the policy of the Foundation and of the Veterans Administration that an individual may not receive funds for his training from the Foundation and from the Veterans Administration (under the Veterans Readjustment Act of 1952 or under Public Law 894, 81st Congress) concurrently.

Applications

Individuals now in college or graduate school should find application materials for the National Science Foundation fellowships to be awarded in 1961 available through the Office of their President, Dean or Department Head; *application forms used in earlier years or those used in other National Science Foundation fellowship programs should not be used.* An applicant in this program may not have an application pending in the Co-operative Graduate fellowship program at the same time. Application materials may also be obtained from the Fellowship Office, National Academy of Sciences—National Research Council, 2101 Constitution Avenue, N.W., Washington 25, D. C.

FELLOWSHIP PROGRAMS OF THE NATIONAL SCIENCE FOUNDATION

The Fellowship Programs provide support to scientists and science teachers in programs of scientific study or scientific work designed to meet their individual needs. Programs in this category offer a wide range of opportunities for training to graduate students, secondary school and college teachers of science, and advanced scholars. Persons selected for fellowships must be citizens or nationals of the United States.

- A. *Predoctoral Fellowships*: (1) Graduate; (2) Cooperative Graduate; (3) Summer Fellowships for Graduate Teaching Assistants.
- B. *Postdoctoral Fellowships*: (4) Postdoctoral (Regular); (5) Senior Postdoctoral—for scientists who have held a doctoral degree in one of the basic sciences for at least five years.
- C. *Fellowships for Teachers*: (6) Science Faculty; (7) Summer Fellowships for Secondary School Teachers.

Individuals may apply in only one National Science Foundation Fellowship Program listed under A, B, or C for a given award period.

- D. *Extramural Fellowships*: (8) NATO (North Atlantic Treaty Organization) Postdoctoral Fellowships in Science; (9) OEEC (Organization for European Economic Cooperation) Senior Visiting Fellowships—for study abroad by senior scientists, mathematicians and engineers. These programs are administered by the National Science Foundation for other agencies.

More detailed information about these programs may be obtained by writing to The Fellowships Section, Division of Scientific Personnel and Education, National Science Foundation, Washington 25, D. C.

NATIONAL SCIENCE FOUNDATION
Washington 25, D. C.

INSTRUCTIONS FOR COMPLETING AN APPLICATION FOR
A NATIONAL SCIENCE FOUNDATION
GRADUATE FELLOWSHIP

Please Note: Individuals who are now National Science Foundation Graduate (not Cooperative Graduate) Fellows will be supplied with a special set of instructions and application materials for requesting renewal of their fellowships.

ALL APPLICATION MATERIALS MUST BE TYPED OR PRINTED IN BLACK INK.

OFFICE CARDS (NSF Forms 9C-53 A)

All applicants must have completed and returned Office Cards 1, 2 and 3.

APPLICATION (NSF Form 9C-50 A)

All applicants must complete an Application. Care should be taken to assure that information is the same on all corresponding items on all of the various forms. Please notify the Fellowship Office, NAS-NRC, immediately of any changes, including the change of address. Note: *Permanent U. S. address must be given; college address may be used only if no other is available.*

The institution chosen must be carefully selected, since individuals awarded fellowships will be requested to justify any change in their choice. Fellowships are awarded for scientific study and/or research at any appropriate nonprofit American or nonprofit foreign institution. An "appropriate institution" in this program is normally considered to be an institution of higher education.

Papers submitted in support of an Application *cannot* be returned to the applicant.

Be sure you have signed the Application.

AFFIDAVIT AND OATH (NSF Form 9C-54 AB)

Each applicant for a National Science Foundation fellowship must submit an Affidavit and Oath. In the United States this Affidavit and Oath should be executed and sworn to before a Notary Public. Civilians abroad should execute it before an appropriate United States Foreign Service Officer and persons in military service abroad may execute it before a United States Commissioned Officer or appropriate United States Foreign Service Officer.

TRANSCRIPTS

All applicants must submit complete official transcripts of their college academic records, undergraduate and graduate. They may be enclosed with the Application or forwarded directly to the Fellowship Office, National Academy of Sciences—National Research Council.

PROPOSED PLAN OF RESEARCH (NSF Form 9C-60 A)

The Proposed Plan of Research must be completed by applicants who have already formulated a plan of study or research. It is expected that applicants applying at the Intermediate or Terminal level will have such a plan. The initial plan may be modified after consultation with the adviser with whom the applicant will be associated as a Fellow.

VERIFICATION OF LEVEL (NSF Form 9C-62 A)

Applicants who will have completed *some graduate work* by the starting date of the proposed fellowship must have a Verification of Level form executed and submitted by the chairman of the department in which the work was done.

RANK IN COLLEGE OR UNIVERSITY CLASS (NSF Form 9C-64 A)

All applicants must have the Rank in College or University Class completed and submitted by the registrars of their *undergraduate* institutions.

GRADE REPORTS (NSF Form 9C-61 A)

All applicants must complete one set of Grade Reports. List courses on *separate* sheets in the following order:

1. Undergraduate Courses—Major Field. Courses in your *major* department which have been or will be applied toward a baccalaureate degree.
2. Undergraduate Courses—All other sciences as listed under Item 10 of the Fellowship Application.
3. Graduate Courses—Major Field. Courses taken in your *major* field since the baccalaureate degree which have been or will be applied toward a graduate degree.
4. Graduate Courses—All other sciences as listed under Item 10 of the Fellowship Application.

Please *do not include* nonscience course grades such as military science, physical education, English, literature, nonscientific language courses, education, public speaking, theology, business administration, or any of the fine arts.

(over)

All courses must be listed chronologically, i.e., first list those taken in your freshman year, then each succeeding year in order. The number of credit hours received should be entered in Column 5 for a semester course or in Column 6 for a quarter course. The official course grade should be entered in Column 7 and the appropriate column checked from 8 to 12. If the passing-grade system of A, B, C, D is not used, please convert your grades to this four passing-grade letter system.

Applicants who are currently enrolled in courses for which they expect to receive credit toward a degree should submit grades for these courses as soon as possible, although the grade may be unofficial.

APPLICANTS IN CERTAIN ACCEPTED SOCIAL SCIENCE FIELDS, AS DEFINED IN PARAGRAPH ONE OF THE ANNOUNCEMENT, SHOULD REPORT THEIR MAJOR FIELD COURSES IN CHRONOLOGICAL ORDER. OTHER COURSES WHICH HAVE BEEN TAKEN IN THE FIELDS LISTED IN ITEM 10 OF THE FELLOWSHIP APPLICATION SHOULD BE REPORTED ON A SEPARATE SHEET.

REFERENCE REPORTS (NSF Form 9C-57 A)

1. Applicants should enter on the report forms their name, field, level of fellowship sought, and date report is due in the Fellowship Office. (See items 4 and 6 below.)
2. As soon as possible, applicants should inform prospective referees of their intention to submit an Application for an NSF fellowship. If they consent to be referees, Reference Reports and return addressed envelopes should be delivered to them.
3. It is important that referees be carefully selected. The form should be given *only* to scientists or faculty members whose **current** knowledge of the applicants' academic and/or professional experience and ability will permit them to give meaningful answers to the questions asked. *At least two* of the four should be persons with whom applicants have worked in their major field.
4. IF APPLICANTS HAVE RECENTLY ENTERED A NEW DEPARTMENT, one or two evaluations may be requested from former teachers. However, it is important to have new referees from present departments. Referees should delay filling out the forms until they are better acquainted with applicants. **REFERENCE REPORTS FOR APPLICANTS IN THIS CATEGORY WILL BE ACCEPTED UNTIL FEBRUARY 6, 1961.**

5. If applicants have applied before and find it necessary to use some of the same referees, the applicants should request the referees to prepare new reports. In most cases they will be able to provide additional and more up-to-date information concerning the ability and training of the applicants.

6. *All* Reference Reports except those described in item 4 above should be in the Fellowship Office as soon as possible and **no later than January 13, 1961.**

GRADUATE RECORD EXAMINATIONS

All applicants should read the section "Important Information" found in the "Special Application for the January 21, 1961 Graduate Record Examinations" *before* completing either of the enclosed forms pertaining to the Graduate Record Examinations. In the case of applicants in interdisciplinary fields or fields bordering on the social sciences in which no Advanced Test specific to that field is offered, the scores achieved on the Advanced Test they take will be used in comparing them with other applicants (at their level of study) in the field in which they have applied. For example, the Advanced Test score achieved by a first-year applicant in the field of metallurgy who takes the test in chemistry will be compared to Advanced Test scores of other first-year applicants in metallurgy and not to those achieved by applicants in chemistry.

The examination is free to each applicant provided he takes it for the sole purpose of supporting an Application for a National Science Foundation fellowship. An applicant must pay the usual GRE fee if he wishes to: (1) be provided with a report of his test results, or (2) have a report of his test results forwarded to an institution in addition to the National Science Foundation. Note that item (1) above modifies several statements in the Graduate Record Examinations Bulletin of Information to the effect that scores will be reported directly to all applicants.

DEADLINE DATE

Applications must be received in the Fellowship Office, National Academy of Sciences—National Research Council, 2101 Constitution Avenue, N.W., Washington 25, D. C., **on or before January 6, 1961.**

Join seal at points  on back of card 2

NAME (to be filled in by applicant) last first middle NSF No. (leave blank)

Ref. Repts. GPA

GRADUATE FELLOWSHIP PROGRAM

SEE INSTRUCTIONS OVERSIDE BEFORE COMPLETING THESE FORMS

NSF Form 9C-53 A
July 1960
Budget Bureau No. 31070-102
Approval Expires: March 31, 1961

DO NOT WRITE
IN THIS SPACE

OFFICE CARD 1

Type or print clearly in black ink.

DO NOT WRITE IN THIS SPACE		Level of Fellowship Sought (see instruction 1)		Year of birth: (55-56)	(9)
App. Form		☐ First Year		☐ Male	(10-12)
Card 2		☐ Intermediate		☐ Female	(13-16)
Pr. Plan		☐ Terminal		☐ Single	(17-20)
Gr. Sh.		Check if you are now an NSF Graduate Fellow		☐ Married	(21-22)
Ver. Lev.		☐ Cooperative Fellow		Number of dependent children: (25)	(23)
Rank Cl.		No. of months in present academic department: (26-28)			(24)
Aff. & O.		Names of four individuals submitting Reference Reports (see instruction 6):		☐ 9 months (academic year)	(25)
R Rept.				☐ 12 months (calendar year)	(26-28)
R Rept.					(29-32)
R Rept.					(33)
R Rept.					(34-35)
Trans.					(35-36)
Trans.					(37-38)
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Trans.					(65)
Trans.					(66)
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Trans.					(89)
Trans.					(90)
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Trans.					(92)
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Trans.					(94)
Trans.					(95)
Trans.					(96)
Trans.					(97)
Trans.					(98)
Trans.					(99)
Trans.					(100)

Permanent residence address (see instruction 8)
NAME: Last Name First Name Middle Name (57-76) PRESENT ADDRESS: Street City Zone State (21-22)

GRADUATE FELLOWSHIP PROGRAM

OFFICE CARD 2

Information on the Application must agree
with corresponding items on this card.

NSF Form 9C-53 A
July 1960
1961

Form Approved
Budget Bureau No. 99-R010.7
Approval Expires: March 31, 1962

DO NOT
WRITE IN THIS SPACE

Name.....last.....first.....middle.....

Present address.....street.....city.....zone.....state.....

Permanent residence address.....street.....city.....zone.....state.....
(see instruction 8)

Check the address where you can be reached on March 15, 1961.
☐ Present address.....city.....zone.....state.....
☐ Permanent address.....city.....zone.....state.....

Proposed major field of study:.....
(see instr. 2)

Special field:.....(number).....(name).....
(see instr. 3)

Educational institution chosen (see instruction 4):.....
Check if you are now an
NSF ☐ Graduate Fellow ☐ Cooperative Fellow

Major academic department in present institution:.....
(see instruction 5)

Level of Fellowship Sought (see instruction 1)
☐ First Year ☐ Male ☐ Female
☐ Intermediate ☐ Single ☐ Married
☐ Terminal

Year of birth:.....
Number of dependent children:.....

Colleges or Universities Attended Including Present Institution (list in reverse chronological order)	City	State	Dates of Attendance	Degrees Earned or Expected and Date Awarded or Expected	Desired Tenure of Fellowship
.....					☐ 9 months (academic year)
.....					☐ 12 months (calendar year)
.....					

Have you applied, or do you intend to apply for other NSF fellowships?
If so, please name.....☐ Yes ☐ No Do you wish your name to appear on Honorable Mention List? (see instruction 7) ☐ Yes ☐ No

Major department chosen:..... Are you a citizen or a national of the United States? ☐ Yes ☐ No

Scientific adviser (if known):..... If not, will you be a citizen by March 1, 1961? ☐ Yes ☐ No

➔ SIGNATURE.....

INSTRUCTIONS FOR REQUESTING APPLICATION MATERIALS FOR NATIONAL SCIENCE FOUNDATION GRADUATE FELLOWSHIPS

All applicants MUST complete Office Cards 1, 2 and 3 immediately and follow instructions closely. All like items on Cards 1 and 2 must be answered identically. Upon receipt of completed Office Cards 1, 2 and 3 at the Fellowship Office, all additional application materials will be sent. Completion of these cards does not comprise application for a fellowship. Deadline for receipt of graduate Application form (9C-50 A) is January 6, 1961. An applicant may have pending only one application for any National Science Foundation fellowships which have periods of tenure, or portions thereof, running concurrently.

1. Level of NSF fellowship sought must agree on all cards. See announcement for definition of levels. If necessary, solicit the aid of the chairman of your major department who will be required to verify the level of fellowship sought.
2. Proposed major field should be one of the following: Anthropology, Astronomy, Chemistry, Earth Sciences, Engineering, Life Sciences, Mathematics, Medical Sciences, Physics, Psychology, Social Sciences (see announcement), or Interdisciplinary.
3. Special field: From the Fields of Specialization (see reverse of Office Card 3), select your proposed field and enter its number and name on the designated lines. If the "other" category is applicable, list the appropriate code number and write in the name of your special field.
4. Educational institution chosen: Name the institution you wish to attend next year. Choose the institution carefully, since individuals awarded fellowships will be requested to justify any change in their choice. Fellowships are awarded for scientific study or scientific work at any appropriate nonprofit American or nonprofit foreign institution. An "appropriate institution" in this program is normally considered to be an institution of higher education.
5. Major academic department should be the one in which you are currently enrolled. If not now enrolled in an institution, list the major department in the institution most recently attended.
6. Individuals chosen to submit reference reports: Choose scientists or professors whose knowledge of your academic and/or professional experience and ability is current. At least two of them should be persons with whom you have worked in your major field. The others should be in closely allied fields. It is desirable to have the consent of each referee before his name is submitted on Office Card 1.
7. Honorable Mention List: In addition to announcements of awards, the National Science Foundation also announces the names of applicants considered worthy of honorable mention. All graduate applicants should respond to this item. Failure to do so will be treated as an affirmative answer. The announcements mentioned above will in general include only that information recorded on the Office Cards.
8. All applicants must be citizens or nationals of the United States by March 1, 1961, and must give a permanent address in the United States. College address is acceptable only if no other address is available.

Office Cards 1, 2 and 3 must be returned to: The Fellowship Office, National Academy of Sciences-National Research Council, 2101 Constitution Avenue, N.W., Washington 25, D. C.

NAME	last	first	middle	city	zone	state	NSF No.	(leave blank)
PERMANENT ADDRESS								
street								

NSF FORM
JULY 1960 9C-50 ABudget Bureau No. 99-R002.7
Approval Expires March 31, 1962**NATIONAL SCIENCE FOUNDATION**
GRADUATE FELLOWSHIP PROGRAM**Fellowship**
ApplicationApplicants' Qualifications Evaluated by Committees of Scientists
Appointed by the National Academy of Sciences—National Research Council**Typing Instructions:**

To facilitate reproduction of this form, TYPE if possible, backing this sheet with carbon to produce reverse image on the opposite side. When printing by hand, use BLACK ink. Do not use a ball-point pen.

Information on Office Cards 1 and 2 must agree with corresponding items on this Application.

1. Name in full: Mr., Mrs., Miss
(last) (first) (middle)
 2. Present address
 3. Permanent U.S. residence address (see instructions)
 4. Age Date of birth Place of birth
 5. Marital status: ☐ Single ☐ Married Number of dependent children
 6. Level of fellowship sought: ☐ First year ☐ Intermediate ☐ Terminal
 7. Length of time you wish to spend on a fellowship: ☐ 9 months ☐ 12 months
(academic year) (calendar year)
 8. If you are or have been an NSF Fellow, when did you receive your first award?
(month) (year)
- Please name the program in which the fellowship was awarded.
How many years have you held an NSF fellowship?
9. How many months have you been enrolled in your present academic department?
 10. Proposed field of study:
 - a. Major field:

☐ Anthropology	☐ Earth Sciences	☐ Mathematics	☐ Psychology
☐ Astronomy	☐ Engineering	☐ Medical Sciences	☐ Social Sciences (see announcement)
☐ Chemistry	☐ Life Sciences	☐ Physics	☐ Interdisciplinary
 - b. Special field:
(See Field of Specialization on reverse of Office Card 3) (name)

11. Name the educational institution at which you wish to pursue your fellowship. Notify Fellowship Office of any change in choice of institution since submitting Office Cards. Note: An NSF Fellow is expected to be affiliated during his tenure with an appropriate nonprofit American or nonprofit foreign institution. An "appropriate institution" in this program is normally considered to be an institution of higher education.

(institution) (department) (scientific adviser, if known)

12. Toward what degree will you be working and when do you expect to receive it?
(degree) (date)
13. Colleges or universities attended including the one in which you are currently enrolled. Arrange in sequence, listing your current (or last-attended) institution first:

College or University and State in which Located	Inclusive Dates of Attendance	Earned Degree	Date Awarded or Expected	Major Field of Specialization

(Please explain any interruption of schooling, i.e., military training, illness, etc.)

14. Academic honors:

15. List any researches previously pursued, giving the title and reference to any published works. List the titles and any references possible for unpublished works. *Do not send any reprints or other publications.* (Use extra sheet of translucent paper if needed.)

.....

.....

.....

16. In what languages, *other than English*, are you able to read understandingly the scientific literature of your profession?

.....

17. Fellowships, scholarships, teaching, and other relevant positions held since entering college or university:

POSITION	PLACE	DATE

18. Name and address of four persons, *each of whom* knows your academic and professional experience and ability, whom you are requesting to submit a Reference Report. *At least two* of the four should be persons with whom you have worked in your major field. *All names given here should be identical to those listed on Office Card 1. If they differ, notify the Fellowship Office of the changes.*

.....

.....

.....

19. List if known (1) Faculty adviser (2) Thesis adviser

OBJECTIVES AND LONG-RANGE PROFESSIONAL GOALS

20. All applicants must submit a detailed statement describing their proposed plan of study and/or research on the form so designated. In addition, each applicant should describe the objectives of his educational program and his long-range professional goals in the space below.

.....

.....

.....

.....

.....

21. **CONDITION.** In the event that you receive an award, any invention or discovery that may be made or conceived by you during the tenure of your fellowship, whether or not arising out of research known to the Foundation, must be reported to the Foundation. Disposition of patent and other rights to such inventions or discoveries shall be your responsibility except that the Foundation is to be given reasonable notice of application by yourself or other persons or institutions for a foreign or domestic patent on any such invention or discovery, and, upon application for a patent, the United States Government shall receive a royalty-free, irrevocable, non-exclusive license to use such invention or discovery for governmental purposes.

I have read the application in detail and agree to the conditions therein.

Signature of Applicant: Date:

Return to The Fellowship Office, National Academy of Sciences—National Research Council,
2101 Constitution Avenue, N. W., Washington 25, D. C.

NSF FORM
JUNE 1960 9C-54 AB**NATIONAL SCIENCE FOUNDATION
FELLOWSHIPS*****Affidavit
and
Oath***

Section 16(d) of the National Science Foundation Act of 1950, as amended, Title 42, United States Code, Section 1874(d), provides as follows:

"No part of any funds appropriated or otherwise made available for expenditure by the Foundation under authority of this Act shall be used to make payments under any scholarship or fellowship to any individual unless such individual (1) has executed and filed with the Foundation an affidavit that he does not believe in, and is not a member of and does not support any organization that believes in or teaches, the overthrow of the United States Government by force or violence or by any illegal or unconstitutional methods, and (2) has taken and subscribed to an oath or affirmation in the following form: 'I do solemnly swear (or affirm) that I will bear true faith and allegiance to the United States of America and will support and defend the Constitution and laws of the United States against all its enemies, foreign and domestic.' The provisions of section 1001 of title 18, United States Code, shall be applicable with respect to such affidavits."

Section 10 of the same Act, Title 42, United States Code, Section 1869, limits the award of fellowships to citizens of the United States.

Each application for a National Science Foundation fellowship must therefore be accompanied by the affidavit and oath provided below. This affidavit and oath should be executed and sworn to before a Notary Public in the United States. Civilians abroad should execute it before an appropriate United States Foreign Service Officer and persons in military service abroad may execute it before a United States Commissioned Officer or appropriate United States Foreign Service Officer. Affidavits and oaths executed before other officials will not be accepted.

I,, do solemnly swear (or affirm) that:
(full name of applicant)

1. I will bear true faith and allegiance to the United States of America and will support and defend the Constitution and laws of the United States against all its enemies, foreign and domestic.
2. I do not believe in, and am not a member of and do not support any organization that believes in or teaches, the overthrow of the United States Government by force or violence or by any illegal or unconstitutional methods.
3. I am a citizen of the United States.

.....
(signature of applicant)

Subscribed and sworn to (or affirmed) before me this day of, A.D. 19.....

at.....
(city) (state)

.....
(signature of Notary Public)

Notary Public

(Seal)

My Notary's Commission

Expires

**Return to the Fellowship Office, National Academy of Sciences—National Research Council,
2101 Constitution Avenue, N.W., Washington 25, D. C.**

NSF FORM
JULY 1960 9C-60 ABudget Bureau No. 99-R000.4
Approval Expires March 31, 1962**NATIONAL SCIENCE FOUNDATION**
GRADUATE FELLOWSHIP PROGRAM***Proposed
Plan of
Research*****Typing Instructions:**

To facilitate reproduction of this form, TYPE if possible, backing this sheet with carbon to produce reverse image on the opposite side. When printing by hand, use BLACK ink. Do not use a ball-point pen.

THIS FORM IS TO BE EXECUTED BY INTERMEDIATE AND TERMINAL YEAR APPLICANTS.

Name.....Date.....
(last) (first) (middle)

Describe in detail your proposed plan of study and/or research during your proposed fellowship tenure.

Return to The Fellowship Office, National Academy of Sciences—National Research Council,
2101 Constitution Avenue, N. W., Washington 25, D. C.

NSF FORM
JULY 1960

9C-62 A

Budget Bureau No. 99-R023.3
Approval Expires March 31, 1962**NATIONAL SCIENCE FOUNDATION
GRADUATE FELLOWSHIP PROGRAM**For the 1961-1962 Academic Year
Fellowships Tenable Not Earlier Than June 1, 1961**Verification
of
Level****To the Applicant:**Please enter your name in the space provided below.
Applicants who have completed no graduate work are not required to submit this form.**To the Department Chairman:**

This form is one of the papers supporting an application for a National Science Foundation fellowship and is to be completed for all *graduate* applicants *who have already finished some graduate work*. Your indication of the appropriate level at which the applicant should be considered will assist the screening panels, which review applications, to make a fair comparative evaluation of each applicant. After the form has been completed it should be submitted either by the applicant with the application form or mailed directly to the Fellowship Office, National Academy of Sciences-National Research Council, 2101 Constitution Avenue, N.W., Washington 25, D.C., where it should be received no later than **January 13, 1961**.

I. Please check only one of the following boxes to indicate the status of the applicant at the time he would enter on the tenure of his fellowship.

This is to certify that it is appropriate for.....to make application for the level
(name of applicant)
of fellowship checked according to the definitions given below:

- ☐ **Terminal Year Fellowship:** An applicant should be verified for this level of fellowship if he is expected, with reasonable assurance, to complete the requirements for a doctoral degree within one calendar year from the date he plans to start the tenure of the fellowship for which application is being made.
- ☐ **Intermediate Fellowship:** An applicant should be verified for this level of fellowship if he will have completed, at the beginning of the tenure of his fellowship, an amount of graduate training considered by the institution at which he is in attendance to be a normal year or more of graduate study, but will require more than one additional year to complete the requirements for a doctoral degree.
- ☐ **First Year Fellowship:** An applicant should be verified for this level of fellowship if he will have completed *less than one normal year of graduate study* at the beginning of the tenure of his fellowship.

II. Please provide the following information regarding the applicant's proficiency.

- A. Has the applicant passed his language examinations? ☐ Yes ☐ No ☐ Don't know
- B. Has he passed his qualifying examinations? ☐ Yes ☐ No ☐ Don't know

.....
(signature of chairman of major department).....
(name of department).....
(name of institution).....
(date)

Return to The Fellowship Office, National Academy of Sciences—National Research Council,
2101 Constitution Avenue, N. W., Washington 25, D. C.

NSF FORM
JULY 1969 9C-64 ABudget Bureau No. 69-B034.2
Approval Expires March 21, 1962**NATIONAL SCIENCE FOUNDATION
GRADUATE FELLOWSHIP PROGRAM****Applicants' Qualifications Evaluated by Committees of Scientists
Appointed by the National Academy of Sciences—National Research Council****Rank in
College or
University Class****To the Applicant:**

Please enter your name in the space provided below.

To the Registrar:The student named below has applied for a National Science Foundation *Graduate* fellowship. The information requested below will be important in evaluating his application.

Please complete the bottom section of this page, sign, and mail it to the Fellowship Office, National Academy of Sciences-National Research Council, 2101 Constitution Avenue, N.W., Washington 25, D. C., as soon as possible. Your cooperation will be greatly appreciated.

....., has indicated that he did his undergraduate work at your institution, terminating or planning to terminate his study in 19..... We shall appreciate knowing his rank-in-class for the latest year for which you have a record.

(name of applicant) (year)

If a rank-in-class is available, please complete the following statement: He ranked from the top among students in his college or university class at the end of his year.

(give a number) (e.g., 1st, 2nd, etc.) (e.g., senior, junior, etc.)

Complete the following statement **ONLY IF A RANK-IN-CLASS IS NOT AVAILABLE**, but a grade point average (honor point ratio) is readily available:

His grade point average was at the end of his year out of a maximum possible grade point average of The minimum grade point average required for graduation is

(e.g., senior, junior, etc.)

If your institution has none of the information requested, please check here. ☐.....
(signature of registrar).....
(name of registrar—typed or printed).....
(name of institution).....
(date)Return to The Fellowship Office, National Academy of Sciences—National Research Council,
2101 Constitution Avenue, N. W., Washington 25, D. C.

NSF FORM
JULY 1960 9C-57 A

Budget Bureau No. 95-R003.6
Approval Expires March 31, 1962

NATIONAL SCIENCE FOUNDATION
GRADUATE FELLOWSHIP PROGRAM

Applicants' Qualifications Evaluated by Committees of Scientists
Appointed by the National Academy of Sciences—National Research Council

Reference
Report
on Applicant

Date Due

Name of Respondent..... Name of Applicant.....
(typed or printed) (last) (first) (middle)
Title..... Applicant's Field.....
(e.g., Microbiology, Theoretical Physics, etc.)
Respondent's..... Applicant's Level ☐ First Year ☐ Intermediate ☐ Terminal
Institution.....

1. I have known him as ☐ an undergraduate ☐ a graduate student ☐ a research assistant ☐ a teaching assistant ☐ other.....
(specify)
2. I have known him for the period of.....years and/or.....months.
3. I served as his ☐ research adviser ☐ teacher in several classes ☐ department chairman ☐ employer
☐ major adviser ☐ teacher in only one class ☐ other.....
(specify)

To the Respondent: In the rating scales below, please describe the applicant by checking, after each trait to be evaluated, the box that most nearly represents your opinion of him. Compare the applicant, on each item, with a representative group of students whom you have known during your professional career who have had approximately the same amount of experience and training as the applicant. If you feel that you lack sufficient knowledge to give a definite rating on any item, give your best estimate of his ability on that scale, and also check the boxes for "Inadequate Opportunity to Observe."

APPLICANT'S SCIENTIFIC ACHIEVEMENTS:

Note: A typical group of 100 students at his level and in his field might be expected to divide about like this→

4. His degree of mastery of the fundamental knowledge in his general field is:
5. His knowledge of, and ability to use the basic laboratory techniques in his field are:
6. His ability to express himself in speech and in writing is:

BELOW AVERAGE	AVERAGE	SOMEWHAT ABOVE AVERAGE	GOOD	UNUSUAL	OUT- STAND- ING	TRULY EXCEP- TIONAL
Lowest 40	Middle 20	Next 15	Next Highest 15	Highest 10		

Inadequate
Opportunity
To Observe

☐

☐

☐

APPLICANT'S CHARACTERISTICS:

Note: A typical group of 100 students at his level and in his field might be expected to divide about like this→

7. His self-reliance and independence in scientific work are:
8. His motivation toward a successful productive scientific career is:
9. His emotional stability and maturity are:
10. His possession of a fertile imagination and originality in his field are:
11. His growth during the total period you have observed him has been:

BELOW AVERAGE	AVERAGE	SOMEWHAT ABOVE AVERAGE	GOOD	UNUSUAL	OUT- STAND- ING	TRULY EXCEP- TIONAL
Lowest 40	Middle 20	Next 15	Next Highest 15	Highest 10		

Inadequate
Opportunity
To Observe

☐

☐

☐

☐

☐

12. How does the applicant stand when compared with the better students currently in your department?.....

13. Compare the applicant with any National Science Foundation Fellows you have known. Mention Fellows by name.

14. In the space below, please add any descriptive comments which will assist in providing a complete picture of the applicant's abilities and potential as a scientist, including, where appropriate, comments on such matters as versatility, competence to envision and plan sound significant research, and ability to make mature sound scientific judgments.

15. **Summary Evaluation: Over-all Scientific Ability**

Comparing the applicant with a representative group (see note below) of students in the same field who have had approximately the same amount of experience and training, how do you rate him in GENERAL ALL-AROUND SCIENTIFIC ABILITY?

0	1	2	3	4	5	6	
BELOW AVERAGE	AVERAGE	SOMEWHAT ABOVE AVERAGE	GOOD	UNUSUAL	OUT- STAND- ING	TRULY EXCEP- TIONAL	Inadequate Opportunity To Observe
Lowest 40	Middle 20	Next 15	Next Highest 15		Highest 10		☐

Note: The educational level of the representative group with whom the applicant is compared is:

☐ College Seniors ☐ First Year Graduate Students ☐ Intermediate Year Graduate Students ☐ Terminal Year Graduate Students

16. Among the students at his present educational level whom I have known in the past years, counting from the
(insert number) (insert number)

top, I would rank this applicant about in over-all scientific ability.
(insert number)

17. Gifted individuals occasionally make mediocre scholastic records. In your opinion, is the applicant's scholastic record, as you know it, an accurate index of his over-all scientific ability? ☐ Yes ☐ No ☐ Don't know. If your answer is no, please explain briefly.

Address of
Respondent.....

Signature of
Respondent.....

Date.....

Return to The Fellowship Office, National Academy of Sciences—National Research Council,
2101 Constitution Ave., N.W., Washington 25, D. C.

[Attachment B]

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL,
OFFICE OF SCIENTIFIC PERSONNEL,
FELLOWSHIP OFFICE,
Washington, D.C., March 1, 1961.

Dr. THOMAS D. FONTAINE,
Program Director for Fellowships,
National Science Foundation, Washington, D.C.

DEAR DR. FONTAINE: We are transmitting by special messenger the following materials:

IBM decks 1 through 3 (alphabetical):

1. Quality group I.
2. Quality group I-R.
3. Quality group II.

IBM decks 4 through 6 (level):

4. Quality group I.
5. Quality group I-R.
6. Quality group II.

IBM decks 7 through 10 (alphabetical by State):

7. Quality group I.
8. Quality group I-R.
9. Quality group II.
10. Quality group III.

IBM deck 11. Quality group IV.

IBM deck 12. Quality group V.

IBM deck 13. Quality group VI.

IBM deck 14. Quality group VII (ineligible).

IBM deck 15. Quality group IX (unsuccessful renewals).

IBM deck 18. Quality group II, III, and IV honorable mentions.

Yours very truly,

C. J. LAPP, Director of Fellowships.

National Science Foundation—Method of selecting graduate awardees, fiscal year 1961

[Attachment C]

Quality group	Number	Percent	Remarks
I.....	305	6.3	Applicants sorted by evaluating panels into groups of "substantially equal ability" (note all of quality groups I, II, III, and IV considered by panels to merit fellowships). Money available for 1,537 fellowships, enough for all of quality group I plus I-R, quality group II, and part of quality group III.
II.....	607	12.5	
III.....	783	16.1	
IV.....	946	19.4	
V.....	826	16.9	
Total finalists.....	3,467	-----	
Nonfinalists.....	659	13.5	
Total new.....	4,126	-----	
Renewal awardees.....	591	12.1	
Renewal nonawardees.....	158	3.2	
Total renewals.....	749	-----	
Total applicants.....	4,875	100.0	

Step 1: All quality group I chosen..... 305

Step 2: All of quality group I-R chosen..... 591

Step 3: All of quality group II chosen..... 607

Step 4: Selection from quality group III made as follows:

$$(a) \text{ State quota calculated: } \frac{\text{College population from State}}{\text{Total college population}} \times 1,537.$$

(b) Selection from quality group III on basis of geographic distribution..... 34

Step 5: All remaining applicants in quality groups III and IV chosen for honorable mention..... 1,695

[Attachment D-1].

COPY OF MEMORANDUM

MARCH 10, 1961.

To: The Director.

From: Associate Director (Educational and International Activities).

Subject: Recommendation of fellowship awards in the graduate fellowship program for March 15, 1961.

1. I have reviewed the fiscal year 1961 graduate fellowship program in my office with the appropriate staff of the Scientific Personnel and Education Division and am recommending approval for the indicated awards in this program. Applications for this program were received at the National Academy of Sciences-National Research Council from 4,875 persons. These applications were reviewed by panels of scientists (see attachment 1) selected by the National Academy of Sciences-National Research Council, who based their evaluations on the ability of the applicants as demonstrated in their application material. In accordance with the Foundation's instructions (attachment 2) applicants were distributed by the panelists into nine quality groups. The distribution was as follows:

Group I: 305 persons judged to be the most able of the new applicants, arranged alphabetically.

Group I-R: 591 renewal applicants judged by the panelists to have demonstrated a rate of progress toward an advanced degree consistent with that expected of NSF fellows.

Group II: 607 new applicants judged to be of slightly lower ability than those in group I, arranged alphabetically.

Group III: 783 new applicants whose ability was judged to be lower than those placed in groups I and II but who were considered by the panelists to be worthy of fellowship support, arranged alphabetically.

Group IV: 946 new applicants of slightly lower ability than group III arranged alphabetically, who were considered by the panelists to be worthy of fellowship support, arranged alphabetically.

Group V: 826 new applicants of slightly lower ability than group IV considered by the panelists to be worthy of fellowship support, arranged alphabetically.

Group VI: 652 remaining eligible new applicants, arranged alphabetically.

Group VII: Seven new applicants considered to be ineligible for the competition.

Group IX: 158 renewal applicants whose rate of progress was judged to be below that expected of an NSF fellow and, therefore, not worthy of further NSF fellowship support.

2. It has been the Foundation's policy that, to the extent possible, the standards for selection of graduate and of cooperative graduate fellows will be the same. This year, the total number of applicants placed in quality groups I and II of the graduate program (1,503) and in quality groups A and B of the cooperative graduate program (980) did not equal the number of graduate-level fellowships for which funds are available. I am, therefore, recommending that a limited number of awards (34) be made to applicants placed in quality group III in the graduate competition, and also a limited number to applicants placed in quality group C (120) in the cooperative graduate competition. (For details see memorandum from Assistant Director, SPE, to Associate Director, E. & I.A., dated March 7, 1961, on this subject.)

3. Attachment 3 lists 1,537 applicants (all in groups I, I-R, and II and 34 in group III) being recommended for fellowship awards in the fiscal year 1961 graduate fellowship program. Attachment 3 also lists the remaining applicants in group III and all applicants in group IV being recommended for honorable mention (1,695 applicants); and all remaining applicants placed in groups V, VI, VII, and IX.

4. The estimated cost for those who will accept the awards is \$4,413,950. It is expected that the declination rate in this program will be the same (10 percent) as that obtained in the comparable competition for the fiscal year 1960.

5. Attachment 4 shows the distribution of applicants and of awards recommended by field of study.

6. Attachment 5 shows the distribution of applicants and of awards recommended by State of permanent residence.

RECOMMENDATION

Approval is requested for the granting of 1,537 awards in the graduate fellowship program in the fiscal year 1961 as indicated in paragraph 3 above and the obligation of \$4,413,950 for support of these fellows. (See par. 4 above.)

Approval is also requested for awarding honorable mention to 1,695 applicants in quality group III who did not receive a fellowship award and to all applicants in quality group IV. Of those receiving honorable mention, 109 requested that their names be omitted from the press release.

HARRY C. KELLY.

(Five attachments not included.)

[Attachment D-2]

COPY OF MEMORANDUM

MARCH 10, 1961.

To: The Director.

From: Associate Director (Educational and International Activities).

Subject: Recommendation for fellowship awards to be made in the (1) post-doctoral, (2) graduate, (3) cooperative graduate, (4) graduate teaching assistants, and (5) secondary school teacher programs on March 15, 1961.

I am submitting herewith for your consideration and approval 5 lists of names of individuals recommended for fellowship awards in the 5 programs listed above and a list of 1,585 names for honorable mention in the graduate program:

Tab	Program	Number of awards offered	Estimated cost of program
A	1. Postdoctoral.....	195	\$906,350
B	2. Graduate.....	1,537	4,413,950
C	3. Cooperative graduate.....	1,100	3,791,700
D	4. Graduate teaching assistants.....	625	600,000
E	5. Secondary school teachers.....	324	860,000
	Total.....	3,781	10,572,000

(Signed) Harry C. Kelly,
(Typed) HARRY C. KELLY.

I hereby approve the awarding of fellowships by the National Science Foundation to the 3,871 persons included on the 5 attached lists of names, and authorize the expenditure of \$10,572,000 for these awards. I also approve the Honorable Mention list of 1,585 names in the Graduate Fellowship program.

(Signed) Alan T. Waterman,
(Typed) ALAN T. WATERMAN.

Director.

(Five attachments (tabs A-through E) not included.)

[Attachment E]

NATIONAL SCIENCE FOUNDATION,
OFFICE OF THE DIRECTOR,
Washington, D.C., March 15, 1961.

I am pleased to inform you that you have been selected as one of the National Science Foundation graduate fellows for the tenure period requested in your application and beginning in the summer or fall of 1961. This fellowship will enable you to devote your full time to graduate scientific study in the field indicated in your original application. If you wish to accept the fellowship, please notify us of your acceptance in accordance with the accompanying instructions by April 15, 1961. We shall appreciate immediate notification in the event that you are unable to accept the award.

The members of the staff of the National Science Foundation have a personal interest in the advancement of your scientific career; we are looking forward to reports on your progress. If at any time you are in Washington, you are cordially invited to visit the Foundation.

With best wishes for success in your future scientific study, I am,

Sincerely yours,

ALAN T. WATERMAN, *Director.*

[Attachment F]

NATIONAL SCIENCE FOUNDATION,
Washington, D.C., March 15, 1961.

The review of all applications for National Science Foundation graduate fellowships for the current award period has now been completed.

I regret to inform you that it will not be possible to award you a fellowship in this competition. The quality of the applicants was very high and as a result many excellent candidates could not be awarded fellowships. Your application was deemed worthy of honorable mention and your name will appear on the honorable mention list which is being released today, unless you indicated in your application that you did not wish to have your name included.

We appreciate your interest in the Foundation's fellowship program and hope that it will be possible for you to make arrangements to continue your training for a career in science. The Foundation expects to continue its fellowship program for the year 1962-63; when it is announced, you may submit another application, if you should wish to do so.

Sincerely yours,

BOWEN C. DEES,
Assistant Director for Scientific Personnel and Education.

[Attachment G]

NATIONAL SCIENCE FOUNDATION,
Washington, D.C., March 15, 1961.

The review of all applications for National Science Foundation graduate fellowships for the current award period has now been completed.

I regret to inform you that it will not be possible for us to award you a fellowship in this competition. We appreciate your interest in our fellowship program and hope that you can make other arrangements to continue your training for a career in science. We expect to support a fellowship program for the year 1962-63 and you may submit another application when it is announced, if you should wish to do so.

Sincerely yours,

BOWEN C. DEES,
Assistant Director for Scientific Personnel and Education.

[Attachment H]

MARCH 20, 1961.

GRADUATE FELLOWSHIP AWARDS ANNOUNCED BY NATIONAL SCIENCE FOUNDATION

The National Science Foundation announced today the award of 1,537 graduate fellowships in the sciences, mathematics, and engineering for the academic year 1961-62. Awardees were selected from 4,875 applicants from all parts of the United States and its territories. The Foundation also released names of 1,588 persons accorded honorable mention.

These awards were made in furtherance of the Foundation's policy of encouraging outstanding college graduates to obtain advanced training in the sciences on a full-time basis.

Of the awards, 347 were made in the life sciences, 1,156 in the physical sciences, including a number of interdisciplinary fields, and 34 awards were made in certain areas of the social sciences.

Graduate fellowship applicants were required to take examinations for scientific aptitude and achievement. These tests were administered by the Educational Testing Service, Princeton, N.J. The test scores, academic record, and recommendations regarding each applicant's abilities were then considered by panels of outstanding scientists in the respective fields of the applicants; the panels were appointed by the National Academy of Sciences—National Research

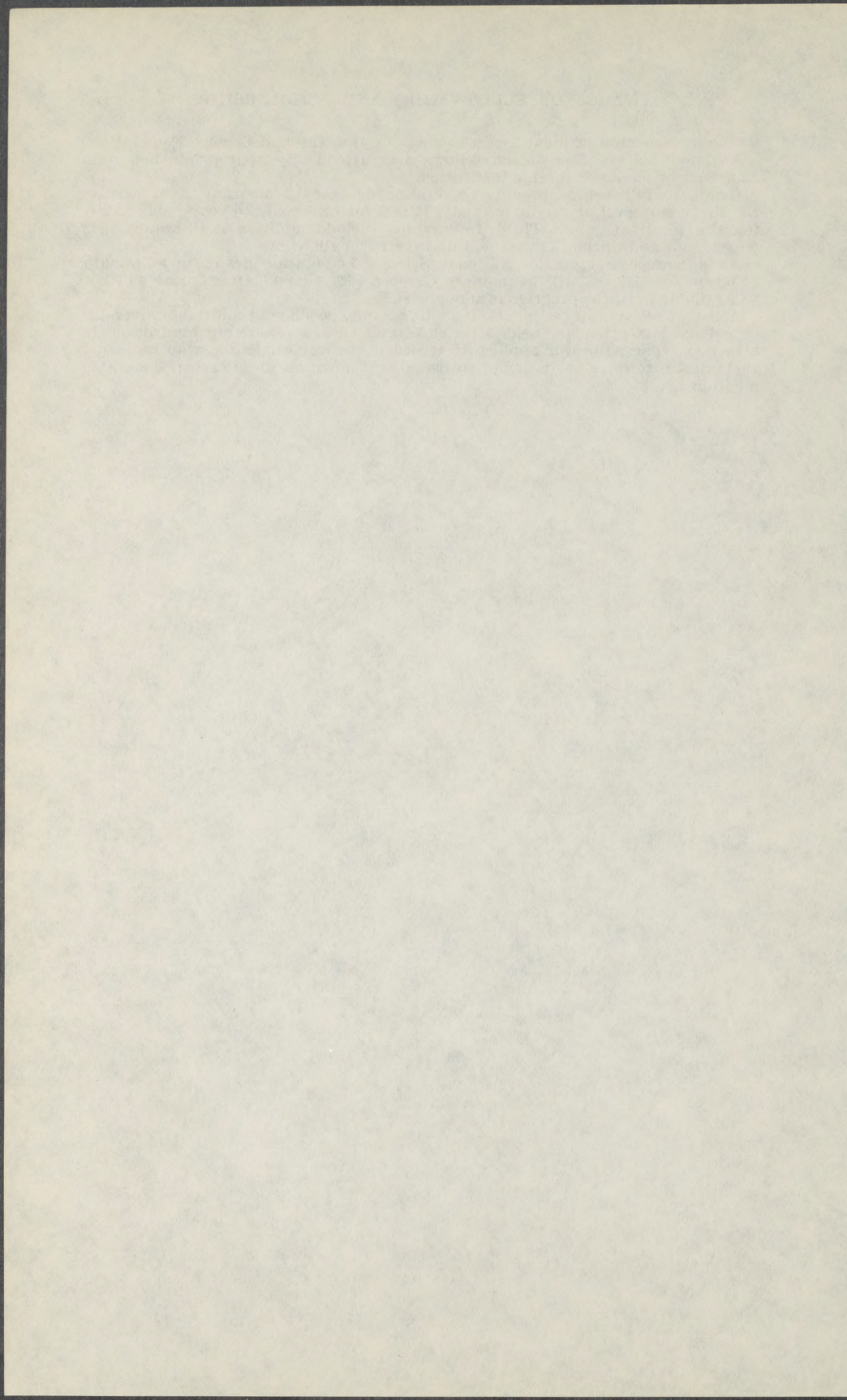
Council. Selection of awardees was made by the National Science Foundation.

National Science Foundation fellows may attend any appropriate nonprofit American or nonprofit foreign institution.

Graduate fellowships provide basic stipends (for 12 months) of \$1,800 for the first year level of graduate study, \$2,000 for intermediate years, and \$2,200 for the terminal year. These fellowships include additional allowances for dependents and tuition, as well as a limited travel allowance.

An announcement of the National Science Foundation graduate fellowship program for 1962-63 will be made in October 1961. Application forms will not be available until the program is announced.

A list of fellowship recipients, including name, permanent address, university or college last attended, field of science, and chosen fellowship institution, is attached. The names of applicants accorded honorable mention who indicated their desire to have their names so listed are shown on the attached honorable mention list.



NATIONAL SCIENCE FOUNDATION

GRADUATE FELLOWSHIP PROGRAM FOR FISCAL YEAR 1961
FELLOWSHIP AWARDS

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>PRESENT INST</u>	<u>FIELD</u>	<u>CHOSEN INST</u>
ALA	BURGESS EDWARD M BURKE JAMES D COULTER CLAUDE A GUNTHER THOMAS E MCCLANAHAN WARREN B MORAN MARTIN T NELSON PAUL JR ROBERTS DENNIS L JR SMITH DONALD R STERNGLANZ ROLF STURGES WILTON III WRIGHT GORDON T	224 SHERIDAN LANE 3659 LOYOLA LANE P O BOX 468 605 E 5TH STREET ROUTE 1 BOX 605 B JESUIT HOUSE OF STUDY P O BOX 22 1009 ADELINE STREET 321 WHEELER ST 509 YORKSHIRE DRIVE 136 S CHEROKEE AVE 60 CHEROKEE HILLS	MIT SPRNG HILL HARVARD U U CAL BERK ALABAMA C JOHNS HOPK U NEW MEX TALLADEGA ALA POLY I HARVARD U JOHNS HOPK U SOUTH	CHEM 3 CHEM 1 PHYS 2 PHYS 2 MATH 1 PHYS 2 PHYS 1 PHYS 1 MATH 1 CHEM 2 OCNG 2 BPHY 1	MIT U CAL BERK HARVARD U U CAL BERK MIT JOHNS HOPK U NEW MEX HARVARD U STANFORD U HARVARD U JOHNS HOPK U MINN
ALAS	MILAN FREDERICK A	YANKOVITCH ROAD FAIRBANKS	U WISC	ANTH 3	U WISC
ARIZ	BISSETT DAVID H BRETERNITZ DAVID A DOLE JIM W FINNEY JOSEPH J	500 ROSSER LANE 3434 E VALENCIA 2321 N EDGEWORE 4904 E 3RD ST PRESCOTT TUCSON PHOENIX TUCSON	U WASH U ARIZONA U MICHIGAN U WISC	EART 3 ANTH 2 BIOL 2 EART 3	U WASH U ARIZONA U MICHIGAN U WISC

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>PRESENT INST</u>	<u>FIELD</u>	<u>CHSEN INST</u>
ARIZ	GREGORY BOB L HALPERN MARTIN B LANGE ROBERT V LEWIS RICHARD B YEAZELL MARTHA E	3030 N 14TH ST 25 CAMINO ESPANOL 3424 N 16TH AVENUE 102 CORONADO COURT 1310 W INA ROAD	CARN TECH HARVARD U HARVARD U PRINCETON U ILLINOIS	ENGR 2 PHYS 2 PHYS 2 PHYS 2 BCHM 1	CARN TECH HARVARD U HARVARD U PRINCETON U ILLINOIS
ARK	BROWN ROBERT M CHRISTIE JOE H GRAMLICH JIM V NEITHOUSE LEON J PARCHMAN LONNIE G WEATHERFORD WENDELL	3914 SO LOOKOUT BOX 123 ROUTE 1 910 SO 10 STREET ROUTE 1 BOX 50 1310 MCLAIN AVE	VANDERBILT L S U U ARKANSAS U DALLAS EMORY U ARK POLY C	PHYS 1 CHEM 2 AGRI 1 PHYS 1 GENE 2 PHYS 1	VANDERBILT L S U U ARKANSAS U WISC EMORY U U ARKANSAS
CAL	ABERS ERNEST S ANDERSON BARRY F ANDERSON LORAN C ANSPAUGH LYNN R AMBREY FRANK T BACHER ANDREW D BANKS PHILIP O BARNES LYNNE R BATES DAVID M BAUER ANDREW B BEAL ALAN J BELMONT PETER A BERNICK ROBERT L BIONDI ENRICO F BLACK NEVILLE A BLANDFORD ROBERT R BLETHEN SANDRA L BLOOMFIELD VICTOR A BLUE JAMES L	116 FOREST VIEW DR 162 FULTON STREET 167 EL CAMINO WAY 2466 HILGARD 189 EUGENIA DRIVE 345 SO MICHIGAN AVE 431 ROSS WAY 14710 MULHOLLAND DR 562 GAYLEY AVE 137 HERMOSA AVE 1457 SANTA CLARA ST 210 UPPER TERRACE 6832 BELLINGHAM AVE 1900 BRYANT ST 1218 NO LAUREL AVENUE CALIF TECH 3699 DELMONT 681 E COTATI AVE 1803 CAMPUS ROAD	U CAL BERT JOHNS HOPK CLAREMONT U CAL BERT U TEXAS CAL TECH CAL TECH REED C U C L A STANFORD U U ST CLARA HARVARD U U CAL BERT STANFORD U PRINCETON CAL TECH U CHICAGO U WISC OCCIDENTAL	PHYS 3 PSYC 2 BOTA 3 BPHY 2 BIOL 2 ASTR 2 EART 2 MATH 1 BOTA 2 ENGR 3 MATH 1 MATH 2 PHYS 2 ENGR 2 ENGR 2 EART 2 BCHM 1 CHEM 3 PHYS 1	U CAL BERT JOHNS HOPK CLAREMONT U CAL BERT U TEXAS CAL TECH CAL TECH U WISC U C L A STANFORD U U CAL BERT HARVARD U U CAL BERT STANFORD U PRINCETON CAL TECH U CAL BERT U WISC CAL TECH

CAL	BORGMAN LEON E	818 N AVENUE 52	LOS ANGELES 42	U CAL BERK	MATH	2	U CAL JOLL
	BOULWARE DAVID G	BOX 242	LAFAYETTE	HARVARD U	PHYS	2	HARVARD U
	BOYD ROBERT G	4669 ARLINGTON AVE	RIVERSIDE	U ILLINOIS	PHYS	2	U ILLINOIS
	BROZAN JOHN B	2921 HADDINGTON DRIVE	LOS ANGELES 64	PRINCETON	PHYS	2	PRINCETON
	BROWN IRENE L	115 RAMONA RD	PORTOLA VALLEY	SANJOSE ST	BIOL	1	SANJOSE ST
	BROWN JEROME R	5 PATTON PLACE	HILLSBOROUGH	STANFORD U	PHYS	1	STANFORD U
	BROWN LAWRENCE D	606 N PALM DR	BEVERLY HILLS	CAL TECH	MATH	1	HARVARD U
	BURNETT DONALD S	1437 GROVE STREET	BERKELEY 9	U CAL BERK	CHEM	3	U CAL BERK
	BURR STEFAN A	7817 TERRACE DR	EL CERITO	U CAL BERK	MATH	1	PRINCETON
	CAMBERN MICHAEL J	6433 TELEGRAPH	OAKLAND 9	U CAL BERK	MATH	2	U CAL BERK
	CAMPBELL JOHN H	444 N ALTA VISTA	MONROVIA	HARVARD U	MCBI	2	HARVARD U
	CARTER CHARLES C	753 N 5TH STREET	COVINA	MIT	CHEM	2	MIT
	CASTOR JOHN I	3445 E GETTYSBURG	FRESNO 26	FRESNO ST	ASTR	1	CAL TECH
	CLARK ALAN R	1317 WEAVER DRIVE	SAN JOSE 25	PRINCETON	PHYS	2	PRINCETON
	CLARK BRIAN R	15011 E GALE AVE	LA PUENTE	POMONA C	BCHM	1	MIT
	COOPER JAMES A	20133 MARILLA STREET	CHATHSWORTH	U C L A	ENGR	2	STANFORD U
	CRAPO LAWRENCE M	P O BOX 1222	PORTERVILLE	HARVARD U	CHEM	2	HARVARD U
	CRICHTON JAMES H	1429 C GROVE STREET	BERKELEY 9	U CAL BERK	PHYS	2	U CAL BERK
	CROSS RALPH H III	3128 COLLEGE AVE	BERKELEY 5	U CAL BERK	ENGR	1	U CAL BERK
	DALRYMPLE GARY B	3470 ORCHARD HILL RD	LAFAYETTE	U CAL BERK	EART	2	U CAL BERK
	DAVIS STEPHEN L	4174 LYMAN RD	OAKLAND 2	U CAL BERK	BPHY	2	U CAL BERK
	DENMAN SUE C	2110 ACTON ST APT 4	BERKELEY	U CAL BERK	ANTH	2	U CAL BERK
	DICK GEORGE J	150 S CALIFORNIA ST	WINTON	BETHEL KAN	PHYS	1	U CAL BERK
	DOUGLAS ROY R	20 MONTE VISTA AVE	VALLEJO	U CAL BERK	MATH	2	U CAL BERK
	DOUGLASS ROGER L	1111 B 9TH STREET	ALBANY 10	U CAL BERK	PHYS	3	U CAL BERK
	DUKE MICHAEL B	365 NO MADISON AVE	PASADENA	CAL TECH	EART	2	CAL TECH
	ELLIS DAVID J	10327 KIMBARK	WHITTIER	COLO ST U	CHEM	1	U CAL BERK
	ELLSWORTH BARBARA H	6247 ORION AVE	VAN NUYS	BRIG YNG U	MCBI	2	BRIG YNG U
	FELDMAN MARTIN R	1636 BEVERLY GLEN BLV	LOS ANGELES 24	U C L A	CHEM	3	U C L A
	FOLKMAN JON H	1732 MILVIA	BERKELEY 9	U CAL BERK	MATH	1	PRINCETON
	FRANZ GILBERT W	1073 WEST AVENUE	REEDLEY	SANJOSE ST	EART	1	PENN ST U
	GETZINGER RICHARD W	908 STICHMAN	LA PUENTE	U CAL BERK	ENGR	2	U CAL BERK
	GIANCOLI DOUGLAS C	1470 KEONCREST	BERKELEY 2	MIT	PHYS	2	U CAL BERK
	GIBSON EDWARD G	427 N HILL	PASADENA	CAL TECH	ENGR	2	CAL TECH
	GRAHAM RONALD L	911 EUCLID AVENUE	BERKELEY 4	U CAL BERK	MATH	2	U CAL BERK
	GRIFFITH HAYES O	3800 N GAREY AVENUE	LA VERNE	CAL TECH	CHEM	2	CAL TECH

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>PRESENT INST</u>	<u>FIELD</u>	<u>CHOSEN INST</u>
CAL	GRIFFITHS ROBERT B	STANFORD UNIV	STANFORD U	PHYS 3	STANFORD U
	GRIMES CHARLES C	3014 1/2 BENVENUE AVE	U CAL BERK	PHYS 3	U CAL BERK
	GRZESIK JAN A	10205 8TH AVE	HARVARD U	PHYS 3	HARVARD U
	HAGADORN IRVINE R	1118D 8TH STREET	U CAL BERK	ZOOL 3	U CAL BERK
	HALEY KENNETH W	1090 TRESTLE GLEN RD	STANFORD U	ENGR 1	PRINCETON
	HARTWELL LELAND H	152 SO BONNIE	CAL TECH	BCHEM 1	U CAL BERK
	HASSLER FRANCES J	446 SO BENTLEY	U C L A	ANTH 2	U C L A
	HAYLER DONALD A	908 HOLLY ROAD	HARVARD U	PHYS 2	HARVARD U
	HECHLER STEPHEN H	835 EMERALD AVE	CAL TECH	MATH 1	U WISC
	HEILBRON JOHN L	1358 SCENIC	U CAL BERK	SOSC 3	U CAL BERK
	HELLER MARILYN B	317 NO VAN NESS AVE	U C L A	CHEM 2	CAL TECH
	HENDRICKS TAREAH J	2242 AVENIDA DE PLAYA	U CAL JOLL	PHYS 1	U CAL JOLL
	HOLDWAY MICHAEL J	1739 FRANCISCO ST	U CAL BERK	EART 3	U CAL BERK
	HONE DANIEL W	3412 WASHINGTON ST	U ILLINOIS	PHYS 3	U ILLINOIS
	HOUGH WILLIAM W	600 CHATHAM PLACE	NO WESTERN	ENGR 1	STANFORD U
	HUDSON DOHERTY B	2319 21 AVENUE	U CAL SANF	MDSC 2	U CAL SANF
	HUFBAUER KARL G	1821 TORREY PINES RD	OXFORD U	SOSC 2	U CAL BERK
	HULD BERT	219 N CANYON	CAL TECH	PHYS 1	U CAL BERK
	JAECKEL LOUIS A	13701 BRACKEN STREET	U C L A	MATH 1	HARVARD U
	KARIG DANIEL E	4432 WOODLEIGH LANE	COLO MINES	EART 1	ST LOUIS U
	KASPER JEROME V	101 NO HILL AVE	CAL TECH	CHEM 1	U CAL BERK
	KEEFE JAMES R	580 EATON AVENUE	U WASH	CHEM 2	U WASH
	KEESING ROGER M	744 FRENCHMANS RD	HARVARD U	ANTH 2	HARVARD U
	KEIGHTLEY WILLARD O	410 SO MENTOR	CAL TECH	ENGR 3	CAL TECH
	KENNEDY KENNETH A	895 SUTTER STREET	U CAL BERK	ANTH 3	U CAL BERK
	KIRK WILLIAM L JR	10845 1/2 STRATHMORE	U C L A	PSYC 2	U C L A
	KLEIGER LINDA J	15023 1/2 DICKENS ST	U C L A	SOSC 1	U C L A
	KLEIN STANLEY A	2046 SO OAKS AVE	CAL TECH	PHYS 1	U CAL BERK
	KLOTZ EUGENE A	208 DARTMOUTH PLACE	YALE U	MATH 3	YALE U
	KONRAD MICHAEL W	S PABLO YCHT HBR BX32	U CAL BERK	BPHY 2	U CAL BERK
	KRASNE FRANKLIN B	72 PLATT	YALE U	PSYC 2	YALE U
	KRIEGER STEPHAN J	1302 B ALBINA AVENUE	U CAL BERK	PHYS 2	U CAL BERK
	KULA RICHARD J	8749 YOUNGDALE	U CAL RIVR	CHEM 1	MIT
	LANDGREBE JOHN A	1539 44TH AVENUE	U ILLINOIS	CHEM 2	U ILLINOIS
	LANG SIDNEY B	942 KIRKHAM ST	U CAL BERK	ENGR 3	U CAL BERK
	LEVINE MICHAEL J	371 S WILSON	CAL TECH	PHYS 3	CAL TECH

CAL	LEWIS FRANCIS H	429 WAVERLEY STREET	MENLO PARK	STANFORD U	PHYS	2	STANFORD U
	LEWIS RICHARD A	5144 CHINNEAS AVE	TARZANA	U C L A	ENGR	2	STANFORD U
	LINDQUIST EVERT E	1671 SHATTUCK AVENUE	BERKELEY 9	U CAL BERK	ZOOL	3	U CAL BERK
	LINDSEY JAMES S	1138 SAN VICENTE BLVD	SANTA MONICA	CAL TECH	PHYS	1	U CAL BERK
	LINSON LEWIS M	1425 OAK STREET	OAKLAND	STANFORD U	PHYS	2	STANFORD U
	MACINTYRE FERREN	BOX 47 CASITAS PASS	CARPINTERIA	MIT	CHEM	2	MIT
	MACOMBER JAMES D	P O BOX 1216	MARYSVILLE	MIT	CHEM	2	MIT
	MARDELL RICHARD L	9532 DE ADALENA	ROSEMEAD	U C L A	ENGR	2	U ILLINOIS
	MARSHALL J HOWARD	680 WESTBRIDGE PLACE	PASADENA	CAL TECH	PHYS	3	CAL TECH
	MARTIN LAURENCE R	7115 OLIVETAS AVE	LA JOLLA	POMONA C	CHEM	1	MIT
	MASTERS MILLICENT R	2520 RIDGE ROAD	BERKELEY 9	U CAL BERK	MCBI	2	U CAL BERK
	MATTHEWS JUNE L	537 E ALTADENA DRIVE	ALTADENA	MIT	PHYS	2	MIT
	MAURER CHARLES J	4716 W 172ND STREET	LAWDALE	SANJOSE ST	ENGR	1	U WASH
	MAXWELL DOUGLAS L	BOX 289 WALKER HALL	CLAREMONT	POMONA C	SOSC	1	COLUMBIA U
	MCDOWELL EDWARD R	2505 QUEENSBERRY RD	PASADENA	CAL TECH	ENGR	2	CAL TECH
	MCREYNOLDS STEPHEN R	510 MESA RD	SANTA MONICA	YALE U	MATH	1	HARVARD U
	MERZ MARTIN D	RT 1 BOX 191	WASCO	STANFORD U	ENGR	1	U SHEFFLD
	MIHALAS DIMITRI M	4839 W SLAUSON AVE	LOS ANGELES	CAL TECH	ASTR	2	CAL TECH
	MILDER DAVID M	4265 DENNY AVENUE	N HOLLYWOOD	HARVARD U	PHYS	2	HARVARD U
	MILLSTEIN JERRY	623 N EDINBURGH	LOS ANGELES 48	REED C	PHYS	1	U CAL BERK
	MONTI STEPHEN A	34 ROBERTS AVE	SAN RAFAEL	U CAL BERK	CHEM	1	MIT
	MOERS CHRISTOPHER N	815 ORMOND CT	SAN DIEGO 8	U S N A	OCNG	1	U CAL JOLL
	MOORE CHARLES B	1117 E 9TH STREET	ALBANY	U CAL BERK	CHEM	2	U CAL BERK
	MORRIS WILLIAM G	2803 MINNA AVE	OAKLAND 19	U CAL BERK	ENGR	1	U CAL BERK
	MOYNIHAN CORNELIUS T	1491 SAN JUAN AVENUE	SAN JOSE	PRINCETON	CHEM	2	PRINCETON
	MUNSON JOHN H	1414 CLARK AVENUE	BURBANK	U CAL BERK	PHYS	2	U CAL BERK
	NEIGHBOR JAMES E	1867 SHUEY AVENUE	WALNUT CREEK	MIT	PHYS	3	MIT
	NELSON ANDREW P	1515A MILVIA ST	BERKELEY 9	U CAL BERK	BOTA	2	U CAL BERK
	NELSON KEITH B	575 VISTAMONT	BERKELEY 8	U CAL BERK	ZOOL	2	U CAL BERK
	NEVILLE DONALD E	3429 W 60TH STREET	LOS ANGELES 43	U CHICAGO	PHYS	3	U CHICAGO
	NIETO MICHAEL M	2106 W IMPERIAL HWY	LOS ANGELES 47	U CAL RIVR	PHYS	1	CAL TECH
	NOBLE DONALD C	1 C ESCONDIDO VILL	STANFORD	STANFORD U	EART	3	STANFORD U
	OCONELL JOHN P	13311 ETHEL BEE WAY	SANTA ANA	MIT	ENGR	1	MIT
	PARKER PETER D	949 W NEWMARK	MONTEREY PARK	CAL TECH	PHYS	3	CAL TECH
	PEAK LLOYD S	8851 CLARINDA AVE	PICO RIVERA	LONG BEACH	CHEM	1	STANFORD U
	PEARSON GERALD A	328 26TH STREET	MANHATTAN BCH	U CHICAGO	CHEM	2	U CHICAGO

STATE	NAME	ADDRESS	PRESENT INST	FIELD	CHOSEN INST
CAL	PHILLIPS LORNA M	49 SAN MATEO RD	U CAL BERK	ZOOL 1	MAX PLANCK
	PIERSON MARY B SIS	RALSTON HALL	U NOTRE D	MCBI 2	U NOTRE D
	PITZER RUSSELL M	12 EAGLE HILL	HARVARD U	CHEM 3	HARVARD U
	RAPIER JERRY L	1021 COLLEGE AVENUE	STANFORD U	PHYS 2	STANFORD U
	RENKEN JAMES H	811 E SACRAMENTO ST	CAL TECH	PHYS 3	CAL TECH
	REYNOLDS MITCHELL W	2721 HILLEGASS AVE	U CAL BERK	EART 2	U CAL BERK
	RICHIE KENNETH E	1918 1/2 GRACE AVE	U C L A	PHYS 2	U C L A
	RIMMERMAN ERNEST A	455 N KILKEA DR	U C L A	BCHM 1	U CAL BERK
	ROEDER DAVID W	3347 YOSEMITE AVE	U CAL BERK	MATH 2	U CAL BERK
	RONY PETER R	500 NO WILCOX AVE	U CAL BERK	ENGR 2	U CAL BERK
	RUSHPORTH CRAIG K	205 4 STANFORD VILL	STANFORD U	ENGR 3	STANFORD U
	SAEGEBARTH ELLEN I	835 OXFORD STREET	U CAL BERK	CHEM 1	RADCLIFFE
	SAHYUN MELVILLE R	102 E PUEBLO STREET	U CAL BERK	CHEM 3	U C L A
	SHANKS WESLEY L	1278 N SIERRA BONITA	CAL TECH	PHYS 2	CAL TECH
	SILVERSTONE HARRIS J	101 NORTH HILL AVE	CAL TECH	ENGR 2	CAL TECH
	SKIDMORE LIONEL J	3401 LAWRENCE	CAL TECH	SOSC 2	HARVARD U
	SMITH DAVID H	19 SOUTH MARENGO AVE	HARVARD U	PHYS 2	CAL TECH
	SNIVELY FRANK T	955 E CALIFORNIA BLVD	CAL TECH	ENGR 2	CAL TECH
	SPECT WALTER A JR	446 S OAKLAND AVE	CAL TECH	ENGR 2	CAL TECH
	STEA DAVID	407 8 STANFORD VILL	STANFORD U	PSYC 2	STANFORD U
	STEINGOLD HAROLD	407 16TH STREET	U C L A	ENGR 2	U C L A
	STREET ROBERT L	416 WAVERLEY STREET	STANFORD U	ENGR 3	STANFORD U
	SUELZLE LARRY R	409 HAWTHORNE AVE	STANFORD U	PHYS 1	STANFORD U
	SUMNER PETER R	17034 KINGSBURY ST	ANTIOCH C	CHEM 1	CAL TECH
	SUO MIKIO	10147 SO MARKS	MIT	ENGR 2	MIT
	TAYLOR CHARLES R	10426 ALEXANDER	HARVARD U	PHSL 2	HARVARD U
	TAYLOR ROBERT W	109 E 216 STREET	U SO CALIF	MATH 1	U SO CALIF
	TELLER DAVID C	2321 BLAKE STREET	U CAL BERK	BCHM 2	U CAL BERK
	TELLER DAVIDA Y	2321 BLAKE STREET	U CAL BERK	PSYC 2	U CAL BERK
	THIELE ALAN G	831 CAMELLIA WAY	U CAL BERK	ENGR 1	U CAL BERK
	THOE DALE W	1325 TORRANCE AVE	STANFORD U	MATH 2	STANFORD U
	THOMAS DONAL D	ROUTE 2 BOX 458	CAL TECH	CHEM 2	CAL TECH
	THOMASSEN KEITH I	43 A ESCONDIDO VIL	STANFORD U	ENGR 3	STANFORD U
	THOREN VICTOR E	10892 1/2 STRATHMORE	U C L A	SOSC 2	U C L A
	THORNTON ROBERT M	RT 1 BOX 1697	HARVARD U	BOTA 2	HARVARD U
	TURNER GEORGE D	101 WAVERLY DR	U CAL BERK	EART 2	U CAL BERK

VER PLANK PETER	7885 TORREY LANE	LA JOLLA	MIT	ENGR	1	MIT
VICTOR JUDITH C	730 N CRESCENT HGTS	LOS ANGELES 46	RADCLIFFE	SOSC	2	RADCLIFFE
VIDAVER WILLIAM E	315 14TH STREET	PACIFIC GROVE	STANFORD U	BOTA	3	STANFORD U
VILLANUEVA RICHARD C	11021 N NOBLE AVE	SAN FERNANDO	U C L A	MATH	1	U C L A
VLASES GEORGE C	134 NORTH OAK AVE	PASADENA	CAL TECH	ENGR	2	CAL TECH
WAGNER TERRY J	829 RILEY DRIVE	ALBANY 6	U CAL BERK	ENGR	3	U CAL BERK
WATTERS GARY Z	220 W 10TH AVE	CHICO	STANFORD U	ENGR	2	STANFORD U
WEIL JON D	509 E 11TH ST	DAVIS	U CAL DAV	GENE	2	U CAL DAV
WEILER JOHN H JR	2627 ETNA ST	BERKELEY 4	U CAL BERK	BOTA	3	U CAL BERK
WEILL DANIEL F	UNIV OF CALIFORNIA	BERKELEY 4	U CAL BERK	EART	3	U CAL BERK
WEINSTEIN SANDRA	2667 ELLENDALE PL	LOS ANGELES	U SO CALIF	MATH	2	U SO CALIF
WERSEL ORTWIN A	2149 ECHO PARK AVE	LOS ANGELES	CAL TECH	CHEM	1	HARVARD U
WIGLEY NEIL M	1421 MC GEE	BERKELEY 3	U CAL BERK	MATH	2	U CAL BERK
WILLEMSEN ELEANOR W	2171 PRINCETON ST	PALO ALTO	STANFORD U	PSYC	2	STANFORD U
WILLIAMSON ROBERT E	1125 A 10TH STREET	ALBANY 10	U CAL BERK	MATH	2	U CAL BERK
WILLIS EDWIN O	887 INDIAN ROCK AVE	BERKELEY 7	U CAL BERK	ZOOL	2	U CAL BERK
WILSON WALTER D	2000 DURANT APT 4	BERKELEY 4	U CAL BERK	ENGR	2	U CAL BERK
WIRTH JAMES F	1745 WASHINGTON ST	SAN FRANCISCO	U NOTRE D	MATH	1	U CAL BERK
WITTE DANIEL H JR	37 FIESTA STREET	REDWOOD CITY	STANFORD U	ENGR	2	STANFORD U
WULF DANIEL L	10528 LIVE OAK AVENUE	ARCADIA	CAL TECH	CHEM	3	CAL TECH
YOUNG RAYMOND G	2466 42ND AVE	SAN FRANCISCO	WALLAWALLA	ENGR	1	STANFORD U
YURA HAROLD T	505 N MAR VISTA	PASADENA	CAL TECH	PHYS	2	CAL TECH
ZYK STANLEY H	39 DESCON DIDO VIL	STANFORD	STANFORD U	ENGR	3	STANFORD U

COLO	BAKER M MICHELLE	335 S 41 STREET	BOULDER	U COLORADO	ZOOL	2	U COLORADO
	BARTH THEODORE J	1515 N CHESTNUT ST	COLORADO SPGS	REGIS C	MATH	1	U NOTRE D
	CLARK LOWELL E	1208 SO COLLEGE	FORT COLLINS	STANFORD U	ENGR	3	U STANFORD U
	CORNWALL JOHN M	1034 MONACO PKWY	DENVER	U CAL BERK	PHYS	3	U CAL BERK
	DAILEY DIXIE L	2405 VANCE STREET	LAKEWOOD 15	COLO ST U	GENE	1	U TEXAS
	DEWEY CLARENCE F JR	1414 BONFORTE BVD	PUEBLO	CAL TECH	ENGR	2	CAL TECH
	GRAUE DENNIS J	3854 REED STREET	WHEAT RIDGE	U COLORADO	ENGR	1	CAL TECH
	HAWLEY CHARLES C	10041 W 9TH DRIVE	LAKEWOOD 15	U COLORADO	EART	2	U COLORADO
	HEATHCOCK CLAYTON H	2224 ARAPAHOE	BOULDER	U COLORADO	CHEM	2	U COLORADO
	IRWIN HENRY J	127 ALBION STREET	DENVER 7	HARVARD U	ATH	2	HARVARD U

CONN	SHAMROTH STEPHEN J SHIELDS ROBERT M JR SUPLINSKAS RAYMOND J TUTTO LOUIS E TORRO NICHOLAS J JR VIMMERSTEDT JOHN P WALLACE JOHN R	86 SEMINOLE CR P O BOX 1062 80 FRANCIS AVE 45 WESTWOOD DR 278 HUNTING HILL AVE 70 CENTRAL AVE 3 185 LAWRENCE STREET	W HARTFORD DARIEN HARTFORD 6 EASTON MIDDLESEX NEW HAVEN 15 NEW HAVEN	R P I MIT YALE U U VIENNA CAL TECH YALE U YALE U	ENGR 1 EART 2 CHEM 1 ENGR 1 CHEM 2 AGRI 2 MATH 1	COLUMBIA U MIT BROWN U U CAL BERK CAL TECH YALE U CAMBRIDGE U
DEL	DAY BENJAMIN D JORDAN DAVID M KING MERRILL K LOOMIS HERSCHEL H JR TURNER LAURA H	216 DALLAM ROAD 114 NORTH ROAD 38 SEMINOLE AVENUE 705 WEST 31ST STREET 1504 TREVALLEY ROAD	NEWARK WILMINGTON 3 CLAYMONT WILMINGTON 2 WILMINGTON 3	CORNELL U OHIO ST U CARN TECH MIT DUKE U	PHYS 3 CHEM 3 ENGR 2 ENGR 3 CHEM 1	CORNELL U OHIO ST U CARN TECH MIT U CAL BERK
D C	BELSLEY DAVID A DARLEY JOHN M EASTON WILLIAM B FISHER GEORGE W HAYMAKER RICHARD W MACNAMARA JOHN P MUCKENTHALER FLORIAN MUNROE MARIAN H MYERS GARDINER H RINEHART GEORGE S SENTURIA STEPHEN D SHEPLEY LAWRENCE C WILSON KENT R	3227 RITTENHOUSE ST 3700 MASS AVE 4739 TILDEN ST N W 4600 CONNECTICUT AVE 7206 BLAIR ROAD N W 1225 OTIS ST N E 1225 OTIS ST N E 2922 GARFIELD ST 3011 45TH ST N W 5104 WEHAWKEN ROAD 5128 LINNEAN TER N W 3914 INGOMAR ST N W 4216 JENIFER ST N W	WASHINGTON 15 WASHINGTON 16 WASHINGTON 16 WASHINGTON 8 WASHINGTON 12 WASHINGTON 17 WASHINGTON 17 WASHINGTON 8 WASHINGTON 16 WASHINGTON 16 WASHINGTON 8 WASHINGTON 15 WASH 15	HAVERFORD HARVARD U CORNELL U JOHNS HOPK CARLETON C CATHOLIC U CATHOLIC U YALE U U CAL BERK U CAL BERK HARVARD U SWARTHMORE U CAL BERK	SOSC 1 PSYC 2 MATH 1 EART 2 PHYS 1 ZOO 2 ZOO 3 BOTA 2 CHEM 3 MATH 3 PHYS 1 PHYS 1 CHEM 3	MIT HARVARD U PRINCETON JOHNS HOPK U CAL BERK CATHOLIC U CATHOLIC U YALE U U CAL BERK U CAL BERK MIT PRINCETON U CAL BERK
FLA	ASH MICHAEL E BRANDON NANCY E	BOX 222 202 S BEVERLY AVE	PUNTA GORDA TAMPA 9	PRINCETON CORNELL U	MATH 3 BCHM 1	PRINCETON YALE U

STATE	NAME	ADDRESS	PRESENT INST	FIELD	CHOSEN INST
FLA	COBB JOHN I III	1419 N BROMOUGH ST	U WISC	MATH	2 U WISC
	DUTKO MICHAEL P	1760 JAMES AVENUE	U MICHIGAN	MATH	2 U MICHIGAN
	ECHOLS RONALD J	917 11TH STREET N	U SO CALIF	EART	2 U SO CALIF
	FOGEL JOSEPH S	1280 S E 5 AVENUE	MIT	CHEM	2 MIT
	GRESENS RANDALL L	151 BLISS DRIVE	FLA ST U	EART	2 FLA ST U
	HARVEY CHARLES M	275 5TH STREET	HARVARD U	MATH	1 STANFORD U
	HOWARD JAMES H III	714 N OLEANDER AVE	DUKE U	EART	1 STANFORD U
	JONES JANET G	1605 19TH PLACE	SWARTHMORE	CHEM	1 CAL TECH
	KLAGES KARLENE C	1431 N E 53RD COURT	MIT	PHYS	1 U CAL BERK
	KUHN HARLAND L	BOX 127	U FLORIDA	ENGR	2 U FLORIDA
	KUNTZ IRWIN D JR	975 N E 94TH ST	PRINCETON	CHEM	1 U CAL BERK
	LAMBERT JERRY R	R 4 BOX 256	U FLORIDA	ENGR	2 NO CAR ST
	MINNICK JOHN H	1824 N W 5 AVE	U FLORIDA	MATH	2 PRINCETON
	NEALY DAVID L	2243 VALENCIA DR	CORNELL U	CHEM	3 CORNELL U
	ROBERTS CHARLES S	6830 TAMiami CANAL RD	MIT	PHYS	2 MIT
	SCHAAF HOMER D	P O BOX 5	MIT	PHYS	1 HARVARD U
	SHOLTES ROBERT S	1741 SW 37TH PLACE	U FLORIDA	ENGR	3 U FLORIDA
	STARCK WALTER A II	1019 S W 7TH STREET	U MIAMI	BIOL	2 U MIAMI
	TRIPLETT MELVIN E	1701 SAXON ST	ILL I TECH	ENGR	1 MIT
	WALKER LOREN H	1705 SEMINOLE ROAD	MIT	ENGR	2 MIT
	WELLS JOHN C JR	2217 AVE F NW	FLA ST U	PHYS	1 U WISC
GA	BRAMBLETT JERRY E	125 HILL STREET	YALE U	MATH	1 HARVARD U
	DELANY VINCENT M	735 JUNIPER ST N E	U CAL BERK	PHYS	1 U CAL BERK
	FERRIS VIRGINIA W	3020 LAKE FOREST DR	AGNES SCOT	MDSC	1 MED C GA
	FLOYD MIDDLETON B	519 S CANDLER STREET	EMORY U	CHEM	2 YALE U
	HALL ZACH W	1607 CLIFTON RD	EMORY U	PHSL	1 HARVARD U
	HARRIS GRADY W	1507 N DECATUR RD NE	MIT	ENGR	1 MIT
	HOLLEY EDWARD R JR	2289 ECHO HILLS CIR	MIT	ENGR	2 MIT
	MORGAN WILLIAM J	36 THACKERY PLACE	PRINCETON	PHYS	2 PRINCETON
	SHEATS JOHN E	503 SPENCER AVE	DUKE U	CHEM	1 MIT
	SULLINS WALTER R JR	461 EMORY DRIVE N E	EMORY U	PSYC	2 EMORY U
	TAYLOR SANDRA D		GA T C	BOTA	2 U NOR CAR
	WOODS ROBERT C	1721 WESTWOOD AVE	GA TECH	CHEM	1 MIT

HAWA	GARCIA RAYMOND A STORY ALFRED E TAKASHIMA HERBERT T	99421 PILIKOA STREET P O BOX 90 PUUNENE R R 1 BOX 342	AIEA MAUI LAHAINA MAUI	U HAWAII STANFORD U CORNELL U	MATH ENGR CHEM	2 3 3	U CHICAGO STANFORD U CORNELL U
IDA	AMUNDSEN CLIFFORD C BURDICK GLENN A CHOULES GEORGE L EVANS DENNIS R MACKI JACK W METTER DEAN E MURPHY CAROL J	1358 SO 4TH 1057 E WYETH 192 TAYLOR ST 393 RANDOLPH 625 EAST OREGON 617 SO JEFFERSON 1355 11TH AVE E	POCATELLO POCATELLO TWIN FALLS ALAMEDA MULLAN MOSCOW TWIN FALLS	IDAHO ST C MIT JOHNS HOPK U IDAHO CAL TECH U IDAHO NO WESTERN	BOTA PHYS BCHM ENGR MATH ZOO ANTH	1 3 2 2 2 1	U MINN MIT IOWA ST U CAL TECH U IDAHO U CHICAGO
ILL	ADAMS ARTHUR C ALBERTS BRUCE M ANDRES RONALD P ANGER FRANK D ARNOLD RICHARD C AUST RICHARD B AUVIL PAUL R JR BACON PHILIP BALDWIN JOHN E BARNES WILLIAM C BRANDT KARL G BROOKS PHILIP R BRUCH LUDWIG W CALNEK EDWARD E CARHART RICHARD A CARTER JEAN E CHANOT GEORGE E JR COLEMAN SIDNEY R COLLINS FRANK G CONDON JOSEPH H	R R 4 2256 LINDEN AVENUE 157 ARLINGTON AVENUE 635 LAKE RD 5520A SO ELLIS AVENUE 240 WILLOW ROAD SHAGBARK ROAD BOX 468 A ROUTE 1 722 NORTH GROVE AVE 215 REGENT STREET 4 DUNHAM ROAD 151 CHARLESTON LANE BOX 12 UNIV OF CHICAGO 3021 HARTZELL STREET 703 W DELAWARE 1069 W PRAIRIE 7008 N ROCKWELL 736 REBA PLACE 833 HAMLIN STREET	ROBINSON HIGHLAND PARK ELMHURST GLEN ELLYN CHICAGO 37 ELMHURST WAYNE WHEATON OAK PARK GLEN ELLYN PARK FOREST HAZEL CREST WINNEBAGO CHICAGO 37 EVANSTON URBANA DECATUR CHICAGO 45 EVANSTON EVANSTON	U ILLINOIS HARVARD U PRINCETON PRINCETON U CHICAGO U ILLINOIS STANFORD U U TENN CAL TECH PRINCETON MIT U CAL BERK OXFORD U U CHICAGO U WISC RADCLIFFE U MICHIGAN CAL TECH NO WESTERN NO WESTERN	CHEM BPHY ENGR MATH PHYS ENGR PHYS MATH CHEM CHEM PHYS ANTH PHYS ZOO PHYS ENGR PHYS	1 2 3 3 3 2 2 3 3 2 1 3 2 1 3 1 2	U WISC HARVARD U PRINCETON CORNELL U U CHICAGO U ILLINOIS STANFORD U U TENN CAL TECH PRINCETON MIT U CAL BERK STANFORD U U CHICAGO U WISC RADCLIFFE U CAL BERK CAL TECH U CAL BERK NO WESTERN

STATE	NAME	ADDRESS	PRESENT INST	FIELD	CHOSEN INST
ILL	CONNOLLY YVONNE I	728 CLARK STREET	NO WESTERN	BCHM 2	NO WESTERN
	COPPOLA PATRICIA T	113 SUNSET POINT	U LONDON	ZOOL 3	U LONDON
	CRAIN ROBERT L	1334 E HYDE PARK BLVD	U CHICAGO	SOSC 2	U CHICAGO
	CUMMINS JAMES M		U WISC	BOTA 2	SO ILL U
	CUSHING JAMES T		ST U IOWA	PHYS 2	ST U IOWA
	DAVIS MICHAEL M	5030 N GLENWOOD AVE	LEYDEN	ASTR 2	LEYDEN
	DAY MAHLON M	710 N BOURLAND AVENUE	LEYDEN	ASTR 1	U CHICAGO
	DONAHUE JACK D	1103 W CALIFORNIA	URBANA	MATH 1	U CHICAGO
	DOMOVAN THOMAS A	NATIONAL STREET	W CHICAGO	EART 2	COLUMBIA U
	DOUGHERTY RALPH C	1006 SOUTH THIRD	CHAMPAIGN	CHEM 3	U ILLINOIS
	EDIDIN MICHAEL A	8 E 10TH STREET	SCOTT A F B	CHEM 2	U ILLINOIS
	FAHEY ROBERT C	9225 S CREGIER	CHICAGO 17	CHEM 2	U CHICAGO
	FAIRBANKS GRANT JR	5748 BLACKSTONE AVE	CHICAGO 37	ZOOL 2	U LONDON
	FAY ROBERT C	301 W MICHIGAN	URBANA	CHEM 2	U CHICAGO
	FRANZETTI JUDITH C	1107 W GREEN ST	GRINNELL C	BPHY 1	MIT
	FREEMAN SMITH JR	5654 DREXEL	U ILLINOIS	CHEM 3	U ILLINOIS
	GARLAND JAMES W JR	2251 BRACKEN LANE	U CHICAGO	BCHM 1	U CHICAGO
	GARRETT VIRGINIA W	5428 S WOODLAWN AVE	HARVARD U	PHYS 1	CAL TECH
	GOLIN STUART J	1206 W UNIV AVENUE	U CHICAGO	PHYS 2	U CHICAGO
	GUSTAFSON ROBERT D	6332 N FRANCISCO	SWARTHMORE	MATH 1	YALE U
	HALPERN HERBERT P	698 S YORK	CHICAGO 45	PHYS 3	U CHICAGO
	HANOR JEFFREY S	2200 W PRATT	MIT	ENGR 2	MIT
	HAPP GEORGE M	729 S HIGHLAND AVE	HARVARD U	MATH 2	HARVARD U
	HETTINGER THOMAS P	PRINCIPIA COLLEGE	CARLETON C	EART 1	HARVARD U
	HILL ROBERT N	RT 2 BOX 482	CORNELL U	ZOOL 2	CORNELL U
	HOWE ROBERT K	906 MICHIGAN AVE	PROCOPIUS	BCHM 1	YALE U
	HUDSON JOHN L	203 EUSTIS	YALE U	PHYS 3	YALE U
	HUMPHREYS TOM D II	11012 S EMERALD	U ILLINOIS	CHEM 1	U C L A
	HUNT RICHARD L	5482 S GREENWOOD AVE	NO WESTERN	ENGR 3	NO WESTERN
	JOHNSON ROBERT P	5519 S DREXEL BLVD	U CHICAGO	ZOOL 3	U CHICAGO
	JONES ROBERT B	103 S LINCOLN AVENUE	U CHICAGO	CHEM 2	U CHICAGO
	JULIAN WILLIAM H	R R 1	U ILLINOIS	CHEM 2	U ILLINOIS
	KERMICLE JERRY L	1340 WESTMOOR	WABASH C	PHYS 1	CAL TECH
	KEYSER LEON F	R R 1	MIT	ENGR 1	MIT
	KLANDERMAN BRUCE H	401 LINCOLN AVENUE	U WISC	GENE 3	U WISC
	KLEMENT WILLIAM JR	807 W ILLINOIS APT 6	CAL TECH	CHEM 2	CAL TECH
		17W150 DEERPATH RD	U ILLINOIS	CHEM 2	U ILLINOIS
			CAL TECH	PHYS 3	CAL TECH
			BENSENVILLE		

ILL	LA ROI GEORGE H	1328 HACKBERRY	WINNETKA	DUKE U	BIOL	3	DUKE U
	*KRAMER, SHELDON J	4456 N SAWYER AVENUE	CHICAGO 25	PRINCETON	ENGR		PRINCETON
	LEDERER CHARLES H	223 E DELAWARE PLACE	CHICAGO 11	U CAL BERK	CHEM	2	U CAL BERK
	LELAND KENNETH O	4416 NORTH MOZART ST	CHICAGO 25	L S U	MATH	3	L S U
	LEUER CONSTANCE J	500 BROADVIEW AVE	HIGHLAND PARK	BELOIT C	MATH	1	RADCLIFFE
	LOGAN ROBERT K	2621 GRANVILLE	CHICAGO 45	MIT	PHYS	1	MIT
	LOHMAR PHOEBE H	23 CHESTNUT ST	GALESBURG	KNOX C	BCHM	1	U CAL BERK
	LOWRY STEPHEN R	5323 S WOODLAWN	CHICAGO 15	U CHICAGO	BCHM	1	U CAL BERK
	LUBAN MARSHALL	7211 S YATES BLVD	CHICAGO 49	U CHICAGO	PHYS	3	U CHICAGO
	MADSEN WAYNE A	6820 N LEOTI AVENUE	CHICAGO 46	STANFORD U	ENGR	1	STANFORD U
	MAIER WILLIAM B II	6048 S INGLESIDE	CHICAGO 37	U CHICAGO	PHYS	2	U CHICAGO
	MALVEN PAUL V	R F D	KINGSTON	CORNELL U	PHSL	2	CORNELL U
	MASSEY JAMES L	444 CHRISTIE STREET	OTTAWA	MIT	ENGR	3	MIT
	MCCORMICK NORMAN J	609 SUDDUTH ROAD	NORMAL	U ILLINOIS	ENGR	2	MIT
	MCCRIMMON KEVIN M	1109 DOUGLAS	URBANA	PRINCETON	MATH	2	PRINCETON
	MICHAEL JOEL A	8906 BRONX	SKOKIE	CAL TECH	PHSL	1	MCGILL U
	MILGRAM RICHARD J	1336 HYDE PARK BLVD	CHICAGO 15	U CHICAGO	MATH	2	U CHICAGO
	MULLIN MICHAEL M	SHIMER COLLEGE	MT CARROLL	U CAL JOLL	BIOL	2	HARVARD U
	MURPHY M MADINE SIS	6363 SHERIDAN ROAD	CHICAGO 40	CLARKE C	BOTA	2	PURDUE U
	MURRAY WILLIAM	20659 GREENWOOD DRIVE	OLYMPIA FIELDS	PURDUE U	ENGR	1	U CAL BERK
	NIENEYER GEORGE L JR	136 WILDWOOD RD	LAKE FOREST	U NOTRE D	ENGR	1	NO WESTERN
	OLCOTT RICHARD J	2250 W 112TH STREET	CHICAGO 43	BELOIT C	CHEM	1	PRINCETON
	PARKMAN MARGARET A	3001 SO PARKWAY	CHICAGO 16	U CHICAGO	SOSC	2	U CHICAGO
	PATERSON WILLIAM J	80X 252	KINCAID	TRINITY C	ENGR	1	MIT
	PERONE SAM P	802 ELM ST	ROCKFORD	U WISC	CHEM	3	U WISC
	POWERS RICHARD J	1142 S KENILWORTH	OAK PARK	ILL I TECH	PHYS	1	U CHICAGO
	PROST MARILYN T	5206 N LIANO AVENUE	CHICAGO 30	DEPAUL U	PHYS	1	NO WESTERN
	READEY DENNIS W	912 SUPERIOR STREET	AURORA	MIT	ENGR	3	MIT
	REESE WILLIAM	907 1/2 S OAK	CHAMPAIGN	U ILLINOIS	PHYS	2	U ILLINOIS
	RENN RONALD G	787 FOREST AVENUE	GLENELLYN 9	MIT	MATH	2	MIT
	ROWND ROBERT H	8149 SO STEWART AVE	CHICAGO 20	HARVARD U	BPHY	2	HARVARD U
	ROZYCKI ALAN A	1427 W WARNER AVE	CHICAGO 13	DARTMOUTH	MCBI	1	HARVARD U
	RUCH LAUREL A	600 S MISSOURI	BELLEVILLE	COLORADO C	MATH	1	U C L A
	RUST MILBERN J	5317 S GREENWOOD	CHICAGO 15	HARVARD U	MATH	1	U CHICAGO
	SACKETT JAMES R	3190 DUNDEE ROAD	NORTHBROOK	HARVARD U	ANTH	3	HARVARD U
	SCHAEFER ELMER J	526 SUNSET RD	WINNETKA	NO WESTERN	MATH	1	HARVARD U
	SCHMIDT LAMMY D	2908 EDINA	ZION	U CHICAGO	CMEM	2	U CHICAGO

*Out of alphabetical order

STATE	NAME	ADDRESS	PRESENT INST	FIELD	CHOSEN INST
ILL	SHEPARD HARVEY K	103 S PARKSIDE AVE	CAL TECH	PHYS 2	CAL TECH
	SHULT ERNEST E	704 A SO JAMES	SO ILL U	MATH 2	U ILLINOIS
	SIMON NANCY J	1520 W 54 STREET	RADCLIFFE	PHYS 2	RADCLIFFE
	SMITHSON SCOTT B	1241 LONG VALLEY RD	U OSLO	EART 2	U OSLO
	SODERBERG ROGER H	56 MONROE	MIT	CHEM 3	MIT
	STEBBINGS JAMES H JR	3055 WAVERLY	JOHNS HOPK	BIOL 2	JOHNS HOPK
	STEPHEN KEITH H	1028 FLORENCE	NO WESTERN	CHEM 2	NO WESTERN
	STEVENS WILLIAM G	RURAL ROUTE 1	MIT	CHEM 1	U KANSAS
	STRUNK JACQUELINE D	1422 GREENWOOD	U BONN	PSYC 1	U CAL BERK
	SWANK ROBERT K	201 W WASHINGTON	U ILLINOIS	PHYS 3	U ILLINOIS
	SWITZER ROBERT L	R F D	U ILLINOIS	PHYS 1	HARVARD U
	TOBEY ROBERT A	1104 W CALIFORNIA	U ILLINOIS	BCHM 1	U ILLINOIS
	TOTTEN STANLEY M	110 W KIRBY	U ILLINOIS	MCBI 1	U ILLINOIS
	UEBBING JOHN J	6049 S TROY STREET	MIT	EART 3	U ILLINOIS
	VALBERT JOHN R	1522 ASHLAND	MIT	ENGR 2	MIT
	VANDEVELDE JOSEPH R	6525 N SHERIDAN ROAD	MIT	ENGR 2	MIT
	VANSTEE SUZANNE C	APT 506 300 S GOODWIN	U CHICAGO	MATH 2	U CHICAGO
	VOLZ RICHARD A	RFD 1	U ILLINOIS	ZOOL 2	U ILLINOIS
	WAHL ARNOLD C	9 E GOETHE	NO WESTERN	ENGR 2	NO WESTERN
	WALTER THEODORE A	3119 N 79TH AVE	U CHICAGO	CHEM 2	U CHICAGO
	WILDE GEORGE R	BOX 162	OBERLIN C	CHEM 1	HARVARD U
	WINDMILLER LEE R	9229 KENTON	IOWA ST C	ENGR 1	STANFORD U
	WOOD ALLEN D	11933 SO 69TH COURT	U CHICAGO	PHYS 2	U CHICAGO
	YELLIN EDWARD L	G 53 A STADIUM TER	PURDUE U	ENGR 3	PURDUE U
	YOUNG PHILIP D	4616 LINSOTT	U ILLINOIS	ENGR 2	U ILLINOIS
	ZIMMERMAN JOHN L	311 KELLY COURT	U ILLINOIS	ANTH 1	U CHICAGO
IND	BEINEKE LOWELL W	RURAL ROUTE 1	U ILLINOIS	BIOL 3	U ILLINOIS
	BRUNNER PHILIP W	207 W MILL STREET	PURDUE U	MATH 1	U MICHIGAN
	CARLSON LEE A	405 CALUMET	PURDUE U	ENGR 2	PURDUE U
	COCANOWER ALFRED B	116 N OLIVE ST	U MICHIGAN	MATH 1	U MICHIGAN
	CORY ROBERT P	122 W ST	WABASH C	ENGR 1	U MICHIGAN
	CURTIS MYRON D	704 E WATER STREET	WABASH C	BCHM 1	U ILLINOIS
	CUSHMAN DAVID W	4243 CRITTENDEN AVE	NO WESTERN	CHEM 2	NO WESTERN
	FAN DAVID P	340 LAUREL DRIVE	WABASH C	BCHM 1	U WISC
			PURDUE U	BPBY 1	MIT
			PURDUE U	MATH 1	U MICHIGAN

IND

FISCH MICHAEL H	8110 N MERIDIAN ST	INDIANAPOLIS	CAL TECH	2	CHEM
FISHER THORNTON R	4526 WASHINGTON BLVD	INDIANAPOLIS 8	CAL TECH	3	PHYS
HADFIELD JACK A	5886 N BROUSE	INDIANAPOLIS 20	PURDUE U	1	ENGR
JACKSON MARION T	243 HARRISON STREET	W LAFAYETTE	PURDUE U	1	BIOL
LUTHER LARS C	314 N WASHINGTON ST	GARY	INDIANA U	2	CHEM
MEDVED JOAN K	234 TAFT ST	GARY	INDIANA U	1	MCBI
MILES GLEN A	RURAL ROUTE 3	CLOVERDALE	MIT	3	ENGR
MOBLEY DONALD I	5016 EVANSTON AVENUE	INDIANAPOLIS 5	BUTLER U	1	ZOO
NEUMANN HOLM W	704 S ROSE AVENUE	BLOOMINGTON	INDIANA U	3	ANTH
PARR JAMES T	4158 MEADOWS DRIVE	INDIANAPOLIS	INDIANA U	2	MATH
PETERS PHILIP C	511 E MORGAN AVENUE	CHESTERON	CAL TECH	2	PHYS
PURSLEY STEPHEN A	5920 HAVERFORD AVE	INDIANAPOLIS	PURDUE U	2	PHYS
RAGLAND THOMAS E	C/O MARGARET KERNODLE	NORTH SALEM	U CAL BERK	3	BCHM
RAIN DON W	1010 1/2 LINWOOD AVE	LAPORTE	U CONN	2	ENGR
RIGG ROBERT G	7504 MADISON AVENUE	HAMMOND	U MICHIGAN	3	ENGR
ROGERS MARION A	R R 1	LEWISVILLE	U MINN	2	EART
ROOT FORREST K	41 E 16TH STREET	BEDFORD	INDIANA U	2	EART
RUPPERT RICHARD W	132 15 NIMITZ DRIVE	W LAFAYETTE	PURDUE U	2	SOSC
SANDERS WILLIAM A	408 E JENNINGS	OXFORD	PURDUE U	2	CHEM
SCHERER KIRBY V JR	P O BOX 773	NEWBURGH	PURDUE U	3	CHEM
SCHMALBERGER DONALD	19904 E KERN ROAD	BLOOMINGTON	HARVARD U	3	INDIANA U
WHITCOMB ALBERT R	2420 W 12TH ST	SOUTH BEND	DARTMOUTH	1	ASTR
WILLIAMS RICHARD R		ANDERSON	PURDUE U	1	MATH

IOWA

BERGE GLENN L	722 DAY STREET	DECORAH	CAL TECH	2	ASTR
BRUMBAUGH JOHN A	1445 HAWTHORN	AMES	IOWA ST C	2	GENE
CHRISTNER JAMES E	R R 3	WELLMAN	U MICHIGAN	2	BCHM
DAUGHERTY JACK D	714 W FOURTH ST	OTTUMWA	IOWA ST C	1	ENGR
EGGER CARL T	508 SO MAIN	MONTICELLO	ST U IOWA	3	ENGR
FELLOWS LARRY D	505 MAPLE STREET	SHENANDOAH	U WISC	3	EART
HANSON FRIDOLF A	700 PARNELL AVENUE	DES MOINES 16	PRINCETON	1	ANTH
HENESATH NORBERT B	4743 DANBURY ST N E	CEDAR RAPIDS	ST U IOWA	1	ENGR
HICKMAN JOHN M	2910 INDIAN HILL RD	CORNELL U	CORNELL U	2	ANTH
HORNE WILLIAM C	912 GRATTON	BURLINGTON	ST U IOWA	1	PSYC

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>PRESENT INST</u>	<u>FIELD</u>	<u>CHOSEN INST</u>
IOWA	JOSEPHSON KEITH B	615 PRAIRIE AVE	WHEATON C	MATH 1	HARVARD U
	KUST ROGER N	579 PAMMEL COURT	IOWA ST C	CHEM 2	IOWA ST C
	LANDWEBER PETER S	1104 MARCY STREET	HARVARD U	MATH 1	HARVARD U
	LEVY MIRAM II	R R 1 MIDDLE RD	IOWA ST C	CHEM 2	HARVARD U
	LILLEHOJ EIVIND B		IOWA ST C	BOTA 2	IOWA ST C
	MCCALL GEORGE J	431 E JEFFERSON	ST U IOWA	PSYC 1	HARVARD U
	MCCLELLAN RONALD E	406 E MAIN STREET	IOWA ST C	ENGR 1	IOWA ST U
	MILLER DON H	519 32ND ST SE	U NOR CAR	MATH 1	U CHICAGO
	MILLER RICHARD K	301 EAST MAIN	IOWA ST C	MATH 1	U CAL BERK
	NICOLSON DAN H	110 E SUMMIT AVE	CORNELL U	BOTA 2	CORNELL U
	NORDSTROM JOHN D		ST U IOWA	CHEM 2	ST U IOWA
	PHILLIPS DAVID T	725 N DURANT ST	IOWA ST U	PHYS 1	U CAL BERK
	POLKING JOHN C		WILLIAMSBURG	PHYS 1	U CAL BERK
	PULLEY ARDEN O	718 PAMMEL CT	ALGONA	MATH 2	U CHICAGO
	SARGEANT PETER B	1219 18 AVE S W	BREDA	MATH 3	IOWA ST C
	SPECKER WAYNE H	1816 E 31ST COURT	AMES	CHEM 3	IOWA ST U
	SUNDBERG RICHARD J	R F D 1	DES MOINES	ENGR 1	MIT
	THOMAS BRUCE R	310 STATE STREET	LINN GROVE	CHEM 2	U MINN
	THORNTON MELVIN C	326 OTSEGO STREET	GUTHRIE CENTER	PHYS 2	CORNELL U
	WEIDLER DONALD J	R R 1	STORM LAKE	MATH 2	U ILLINOIS
			NEW HAMPTON	ZOOL 2	ST U IOWA
KANS	ANDERSON DAVID K	BOX 4	RIVERTON	CHEM 1	U CAL BERK
	BARNHILL ROBERT E	1939 ALABAMA ST	LAWRENCE	MATH 1	U C L A
	BARRETT BRUCE R	1220 BUNKER AVENUE	KANSAS CITY 2	PHYS 1	PRINCETON
	BATH THOMAS D	5015 METROPOLITAN	KANSAS CITY	ENGR 3	U MICHIGAN
	BERRY WILLIAM H	2400 W 49TH TERRACE	SHAWNEE MISSION	MATH 2	U HAMBURG
	CORNELIUS ARCHIE J	1106 KEARNEY	MANHATTAN	ENGR 2	KAN ST U
	DEONIER DICK L	BOX 319	EUDORA	ZOOL 2	IOWA ST U
	ENOS PAUL P		PERRY	EART 2	YALE U
	HALL ROBERT E	503 WEST JEFFERSON	PITTSBURG	PHYS 1	PRINCETON
	HAYES DENNIS E	5864 GRANADA LANE	MISSION	EART 1	COLUMBIA U
	HAYS BYRON G	1024 N YALE AVE	WICHITA 14	EART 3	MIT
	HEAD THOMAS J	19 WASHBURN UNIV	TOPEKA	CHEM 3	MIT
	HEIDER KARL G	505 OHIO STREET	LAWRENCE	MATH 2	U KANSAS
				ANTH 2	HARVARD U

KANS	KEVAN LARRY J	5321 NORWOOD	SHAWNEE MISION	U C L A	CHEM	2	U C L A
	KOCH RICHARD M	112 SOUTH TOPEKA	HAVEN	HARVARD U	MATH	1	PRINCETON
	KOHLMAN DAVID L	515 OHIO	LAWRENCE	MIT	ENGR	3	MIT
	MANTEY JOHN P	BOX 185	SHARON SPG	STANFORD U	ENGR	2	STANFORD U
	MANTEY PATRICK E		SHARON SPRINGS	U WISC	ENGR	2	U WISC
	MILLS ROBERT B	3366 MAYO	TOPEKA	KAN ST TC	ZOOL	2	KAN ST U
	NAUMAN EDWARD B	9219 WENONGA ROAD	SHAWNEE MISSION	U TENN	ENGR	2	U LEEDS
	REYNOLDS WYNETKA A	BOX G K S T C	EMPORIA	ST U IOWA	ZOOL	3	ST U IOWA
	RICHERT ANTON S	838 SO ASH	WICHITA 16	CORNELL U	PHYS	3	CORNELL U
	ROOT JOHN W	1724 1/2 BARKER	LAWRENCE	U KANSAS	CHEM	3	U KANSAS
	SPENCER JOHN B	1500 SHUNGA DRIVE	TOPEKA	CARLETON C	CHEM	1	U CAL BERK
	WALTERS WILLIAM B	9940 HIGH DRIVE	HIGHLAND	U ILLINOIS	CHEM	2	U ILLINOIS
	WARNE THOMAS M JR	725 W MAPLE	LEAWOOD	YALE U	CHEM	1	COLUMBIA U
	WHITENEAD C THOMAS	14 7 STOUTER PLACE	COLUMBUS	MIT	ENGR	2	MIT
	ZIMMERMAN JOHN F		LAWRENCE	U KANSAS	CHEM	2	U KANSAS

KY	BROWN GREGORY N	2595 MILLBROOK DRIVE	LEXINGTON 64	DUKE U	AGRI	3	DUKE U
	BURCKEL ROBERT B	2310 OSAGE AVE	LOUISVILLE 10	U NOTRE D	MATH	1	HARVARD U
	DIERCKES ALBERT C	125 WALLACE AVE	COVINGTON	PRINCETON	ENGR	2	PRINCETON
	FANGMAN WALTON L	2134 TYLER LANE	LOUISVILLE 5	BELLARMINE	PHSL	1	PURDUE U
	HANLON JAMES T	134 MANOR LANE	FT THOMAS	OHIO ST U	ENGR	1	OHIO ST U
	HERM RONALD R	1025 BLUEGRASS AVENUE	LOUISVILLE 15	U NOTRE D	CHEM	1	U CAL BERK
	KEISTER WILLIAM P	2220 KAELIN AVE	LOUISVILLE 5	U LOUISVLE	ENGR	1	YALE U
	LONG WILLIAM S	246 SO HANOVER	LEXINGTON	NO WESTERN	BCHM	1	NO WESTERN
	MARRS JO R	KEENE RD R R 1	MICHOLASVILLE	U CHICAGO	CHEM	1	U CAL JOLL
	SCHNEITER GEORGE R	2836 WHITE WAY	LOUISVILLE 5	PURDUE U	CHEM	1	PURDUE U
	SUICH JOHN E	213 DON ALLEN ROAD	LOUISVILLE 7	MIT	ENGR	3	MIT
	WHITESIDES GEORGE M	GLENBROOK ROAD	ANCHORAGE	CAL TECH	CHEM	2	CAL TECH

LA	CARROLL KEITH J	612 IBERIA STREET	NEW IBERIA	RICE INST	PHYS	2	RICE INST
	CONWAY EDWARD D III	415 FILLMORE AVE	NEW ORLEANS 24	INDIANA U	MATH	2	INDIANA U
	CONWAY JOHN B	415 FILLMORE AVENUE	NEW ORLEANS 24	LOYOLA LA	MATH	1	INDIANA U

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>PRESENT INST</u>	<u>FIELD</u>	<u>CHOSEN INST</u>
LA	CRUMP KENNY S DUCHAMP DAVID J FERTEL NORMAN S FRICKEN RAYMOND L GRAHAM EDWARD W HODGESON JIMMIE A MERRILL SAMUEL III PENNEY DAVID E PITTMAN MICHAEL E REVELLE CAROLE L WHARTON JAMES H	BOX 285 119 CHURCH STREET 3115 NAPOLEON AVE 516 S JEFF DAVIS PKWY 130 GIBSON STREET ROUTE 2 621 ST AUGUSTINE ST 1528 A HARMONY STREET 500 LANE ST 1019 11TH ST 3257 HIGHLAND RD	LA POLY IN SOMSTRN LA TULANE U L S U U CAL BERK L S U TULANE U TULANE U LOYOLA LA L S U L S U	ENGR 1 CHEM 1 MATH 1 PHYS 2 CHEM 3 CHEM 1 MATH 1 MATH 2 PHYS 1 PSYC 1 CHEM 3	STANFORD U U CAL BERK MIT L S U U CAL BERK U CAL BERK HARVARD U TULANE U PRINCETON STANFORD U L S U
ME	BURNS STEPHEN H CLARK ALTON H MOORE JOHN S OCONNOR BRIAN R SCOTT SARAH V TRAFTON PAUL J	39 NEAL ST R F D 3 61 CAMPUS AVENUE 10 HANCOCK STREET	HARVARD U U MAINE BOWDOIN C U ILLINOIS U CHICAGO U MAINE	ENGR 2 PSYC 1 PHYS 1 CHEM 2 ANTH 3 ENGR 1	HARVARD U U WISC U ILLINOIS U ILLINOIS U CHICAGO HARVARD U
MD	BLUM EDWARD H BRENNER DOUGLAS BROWN ROBERT L BROWN STANLEY G CLEMENT DAVID E CLIFTON H EDWARD DOBSON PETER N JR DOWLING ELIZABETH E DYWER THOMAS F FENTRESS JOHN C FERGUSON JOHN D FRIEDMAN WILLIAM A GAMMON ROBERT W	8248 NEW HAMPSHIRE AV 7109 FULTON STREET 10009 KENSINGTON PKWY 9701 E BEXHILL DRIVE 1668 WAVERLY WAY 6812 EVERALL AVENUE 727 MANCHESTER ROAD 10404 CALUMET DRIVE 3537 NEWLAND ROAD 4215 LELAND STREET 9636 BRUNETT AVE 3301 ST PAUL ST	CARN TECH JOHNS HOPK HARVARD U U CAL BERK JOHNS HOPK JOHNS HOPK U MARYLAND PENN ST U PRINCETON AMHERST C YALE U CORNELL U JOHNS HOPK	ENGR 1 PHYS 1 CHEM 3 PHYS 2 PSYC 2 EART 2 PHYS 2 PHYS 1 ENGR 1 BIOL 1 MATH 2 PHYS 1 PHYS 1	PRINCETON CAL TECH HARVARD U U CAL BERK JOHNS HOPK JOHNS HOPK MIT PRINCETON CAMBRIDGE U YALE U HARVARD U YALE U

MD

HALL BARBARA C	BOX 35 A FORK ROAD	BALDWIN	SWARTHMORE	SOSC	MIT
HAZLETT BRIAN A	7802 ELMHURST STREET	DISTRICT HGTS	U MARYLAND	ZOOL	CAL TECH
HEBB MATHILDE J		BUTLER	BYRN MAWR	PHYS	STANFORD U
HOLLAND NICHOLAS D	4100 ROSEMARY STREET	CHEVY CHASE	STANFORD U	PHSL	PRINCETON
HUGHES ANTHONY C	13 WOODLAWN AVENUE	CATONSVILLE 28	LOYOLA MD	MATH	U MINN
KAISER MARTHA L	INWOOD AVENUE	ELLICOTT CITY	HOOD COL	MCBI	PRINCETON
KANTOR PAUL B	2806 WOODSTOCK AVE	SILVER SPRING	PRINCETON	PHYS	JOHNS HOPK
LAMPE DONALD R	6417 SEFTON AVENUE	BALTIMORE 14	CAL TECH	ENGR	U MARYLAND
LICHT ARTHUR L	4327 ROWALT DRIVE	COLLEGE PARK	U MARYLAND	PHYS	PRINCETON
MELSON WILLIAM G	5600 LONGFELLOW ST	E RIVERDALE	JOHNS HOPK	EART	JOHNS HOPK
MILLER WILLIAM H JR	720 N CALVERT STREET	BALTIMORE 2	JOHNS HOPK	PHYS	CAL TECH
NOLAN JERRY A JR	134 BRANNAN ROAD	ABERDEEN	LEHIGH U	PHYS	JOHNS HOPK
NOLL DAGMAR J	701 E GITTINGS	BALTIMORE 12	GOUCHER C	MATH	OXFORD U
PARKER REBECCA A	2716 PORTER ST N W	WASHINGTON 8	U MARYLAND	PHYS	U HARVARD
QUARLES RICHARD H	229 REGESTER AVE	BALTIMORE 12	SWARTHMORE	BCHM	JOHNS HOPK
RECTOR CHARLES W	3121 ST PAUL STREET	BALTIMORE 18	JOHNS HOPK	PHYS	U HARVARD
RUSSEY WILLIAM E	5624 WOODMONT AVENUE	BALTIMORE 12	KALAMAZOO	CHEM	RADCLIFFE
SINGLETERRY ANN M	7100 WILSON LANE	BETHESDA 14	SWARTHMORE	MATH	YALE U
SMITH DAVID A	R F D 2 BOX 400	POCONOKE CITY	YALE U	MATH	U HARVARD
STEINHARDT RICHARD A	4004 LAIRD PLACE	CHEVY CHASE 15	COLUMBIA U	PHSL	U LONDON
STRATHDEE JOHN A	HQ CO CRDL	ARMY CHEM CTR	DUBLIN INS	PHYS	STANFORD U
TAYLOR HOWARD M III	5414 PURLINGTON WAY	BALTIMORE 12	CORNELL U	MATH	U ILLINOIS
TEFFT WAYNE E	4405 EAST WEST HWAY	BETHESDA 14	U ILLINOIS	PHYS	U MARYLAND
TEPLITZ VIGDOR L	4624 KNOX ROAD	COLLEGE PARK	U MARYLAND	MATH	PRINCETON
WELLS ROBERT	5006 WORTHINGTON DR	BETHESDA 16	PRINCETON	PHYS	MIT
WING CHARLES G	4538 PARKTON STREET	BALTIMORE 29	BOWDOIN C	OCNG	

MASS

ALBERT RICHARD H	5 ESMOND STREET	DORCHESTER 21	MIT	CHEM	U HARVARD
ALPERIN JONATHAN L	950 COMMONWEALTH AVE	NEWTON CENTRE	U CHICAGO	MATH	PRINCETON
AUSTIN MICHAEL E	55 GREAT POND RD	WEYMOUTH 90	U NOTRE D	ENGR	MIT
BAKER KIRBY A	7 GROVE STREET	WINCHESTER	HARVARD U	MATH	U HARVARD
BERGER EDMOND L	31 NURSERY STREET	SALEM	MIT	PHYS	PRINCETON
BIRMINGHAM THOMAS J	73 WEST STREET	MILFORD	PRINCETON	PHYS	PRINCETON
BLUMENTHAL RALPH B	HARVARD UNIV	CAMBRIDGE 38	HARVARD U	PHYS	U HARVARD

STATE	NAME	ADDRESS	PRESENT INST	FIELD	CHOSEN INST
MASS	BOHRER HAROLD JR	R F D 2	U CINN	EART 2	U CINN
	BUDNITZ ROBERT J	60 KENILWORTH STREET	YALE U	PHYS 1	HARVARD U
	BUFFINGTON ANDREW	7 WOODLAND ROAD	MIT	PHYS 1	MIT
	CARROLL ALAN S	11 ELLERY STREET	HARVARD U	PHYS 3	HARVARD U
	CHASE THEODORE JR	FARM STREET	U CAL BERK	PHYS 2	U CAL BERK
	CHESEBROUGH CAROLYN	35 MAYFLOWER RD	MT HOLYOKE	GENE 1	HARVARD U
	CLAUSER MILTON J	1 EL CONCHO LANE	MIT	PHYS 1	CAL TECH
	CLEARY RICHARD T	297 COMMONWEALTH AVE	JOHNS HOPK	PHYS 2	JOHNS HOPK
	COE ROBERT S	371 A OLD HARBOR RD	HARVARD U	BCHM 1	U CAL BERK
	COFFEY JOHN J	45 UNION STREET	HARVARD U	EART 1	JOHNS HOPK
	COMLY JAMES B	28 ARLINGTON STREET	HARVARD U	ZOOL 1	JOHNS HOPK
	CONE ALBERT A	300 NEWBURY STREET	HARVARD U	ENGR 2	HARVARD U
	CONLON LAWRENCE W	300 NEWBURY STREET	HARVARD U	PHYS 2	HARVARD U
	COVITZ FRANK H	19 BOULDER DRIVE	HARVARD U	MATH 2	HARVARD U
	CRONIN DAVID V	109 OAKVILLE ST	HARVARD U	CHEM 2	HARVARD U
	DAVISON GERALD C	80 MCLELLAN ST	TUFTS U	ENGR 1	MIT
	DORFMAN MERLIN	246 PLYMOUTH ROAD	HARVARD U	PSYC 1	STANFORD U
	DRINKS JANIS	1603 CENTRE STREET	MIT	ENGR 1	MIT
	EARLE ELIZABETH J	7 LINE STREET	HARVARD U	MATH 2	HARVARD U
	EVENSEN DAVID A	9 RICH STREET	RADCLIFFE	BOTA 2	RADCLIFFE
	FEDERER CHARLES A	41 LOUISE ROAD	CAL TECH	ENGR 2	CAL TECH
	FELDMAN PAUL A	13 CHEEVER STREET	U WISC	AGRI 2	U WISC
	FORD DWAIN L	NECK ROAD	MIT	PHYS 1	MIT
	FUCHS NORMAN H	400 MARLBORO STREET	CLARK U	BCHM 3	CLARK U
	FUGLISTER FREDERICK	29 LITTLE HARBOR RD	MIT	PHYS 3	MIT
	GERSTEIN IRA S	11 ELLERY STREET	SWARTHMORE	MATH 1	HARVARD U
	GODCHAUX WALTER III	21 1/2 INMAN STREET	MIT	PHYS 3	MIT
	GOLDSTEIN STEVEN N	37 DWIGHT STREET	MIT	BOTL 2	MIT
	GRANT WALTER J	118 BAILEY ST	MIT	PHYS 1	MIT
	GUERTIN RALPH F	19 MILTON STREET	MIT	PHYS 3	MIT
	GUIDOTTI CHARLES V	LILAC LANE	WORCESTER	PHYS 1	PRINCETON
	GUILLEMIN VICTOR W	29 PREBLE GARDEN RD	HARVARD U	EART 2	HARVARD U
	HARTSHORNE ROBERT C	194 BRATTLE STREET	HARVARD U	MATH 2	HARVARD U
	IMPINK ALBERT J JR	26 ROSE AVENUE	PRINCETON	MATH 2	PRINCETON
	KALNAJS AGRIS J	55 ASHTON AVENUE	MIT	ENGR 3	MIT
	KAY PAUL D	127 ALBION STREET	HARVARD U	ASTR 2	HARVARD U
			HARVARD U	ANTH 3	HARVARD U

MASS	KLEIMAN STEVEN L	410 ATLANTIC AVENUE	MARBLEHEAD	MIT	MATH	1	HARVARD U
	KORENMAN VICTOR	14 1/2 PRENTISS ST	CAMBRIDGE	HARVARD U	PHYS	2	HARVARD U
	LAHARCHE VALMORE C	1743 COMMONWEALTH AVE	BRIGHTON	HARVARD U	EART	2	HARVARD U
	LARSEN DAVID M	41 LINNAEAN STREET	CAMBRIDGE 38	MIT	PHYS	3	MIT
	LOCKSHIN RICHARD A	BAKER HILL	NORTHAMPTON	HARVARD U	PHSL	2	HARVARD U
	LYNCH WILLIAM T	27 MAYHEN STREET	BOSTON 25	U NOTRE D	ENGR	1	MIT
	MASTERS STANLEY H	3 GINN ROAD	WINCHESTER	AMHERST C	MATH	1	PRINCETON
	MCGOFF DAVID J	29 PRICHARD AVENUE	SOMERVILLE 44	MIT	ENGR	3	MIT
	MOORE PETER B	371 WALNUT ST	BROOKLINE 46	YALE U	BPHY	1	HARVARD U
	MUTCHLER GORDON S	523 BEACON STREET	BOSTON 15	MIT	PHYS	2	MIT
	NELSON RALPH D JR	FISHER STREET	WESTBORO	PRINCETON	CHEM	2	PRINCETON
	OATMAN BARBARA B	25 SACRAMENTO STREET	CAMBRIDGE	VASSAR C	PSYC	1	COLUMBIA U
	OBERLANDER HERBERT	28 THORNTON STREET	REVERE 51	U CONN	PHSL	1	U C L A
	PANKINSKY J KOST A	120 HANCOCK STREET	CAMBRIDGE 39	HARVARD U	EART	2	HARVARD U
	POSTMA THOMAS E	512 CHURCH STREET	WHITINSVILLE	WORCESTER	ENGR	1	WORCESTER
	RALLS KENNETH M	5 BREWER STREET	CAMBRIDGE 38	MIT	ENGR	2	MIT
	ROCK PETER A	180 ENNELL ST	LOWELL	BOSTON U	CHEM	1	U CAL BERK
	ROTHKOPF MICHAEL H	45 HANCOCK STREET	BOSTON 14	MIT	SOSC	2	MIT
	SAVIN HARRIS B	124 PARKER AVENUE	NEWTON HGLDS	HARVARD U	PSYC	3	HARVARD U
	SAVIN SAMUEL M	124 PARKER AVE	NEWTON HGLDS	COLGATE U	EART	1	CAL TECH
	SCHULTZ MARTIN H	125 YARMOUTH ROAD	CHESTNUT HILL	CAL TECH	MATH	1	HARVARD U
	SEGRE GINO C	14 GRAY	CAMBRIDGE 38	MIT	PHYS	3	MIT
	SINGER HARVEY A	474 COMMONWEALTH AVE	BOSTON	MIT	ENGR	1	MIT
	SOUTHARD JOHN B	50 PHILLIPS STREET	BOSTON 14	HARVARD U	EART	2	HARVARD U
	SULLIVAN JEREMIAH D	6 OAK HILL AVENUE	FOXBORO	PRINCETON	PHYS	3	PRINCETON
	WARD HAROLD N	115 UPLAND ROAD	CAMBRIDGE 40	HARVARD U	MATH	2	HARVARD U
	WARNER FRANK W III	258 LEXINGTON ST	WATERTOWN 72	MIT	MATH	2	MIT
	WARNER JONATHAN R	50 PETERBOROUGH ST	BOSTON 15	MIT	BPHY	2	MIT
	WEINER STEPHEN D	36 MORRILL STREET	W NEWTON 65	MIT	PHYS	1	MIT
	WEINSTEIN HERBERT G	32 KINGS BEACH TER	SWAMPSCOTT	TUFTS U	ENGR	1	MIT
	YEGIAN CHARLES D	R F D 2 HARKNESS RD	AMHERST	U CAL BERK	BPHY	2	U CAL BERK
MICH	ANDERSEN CARL M	37249 HEBEL ROAD	RICHMOND	U PENN	PHYS	2	U PENN
	BAJEMA CARL J	2053 HUIZEN AVE S W	GRAND RAPIDS 9	WEST MICH	GENE	2	MICH ST U

MICH	NAME	ADDRESS	CITY	UNIVERSITY	DEGREE	RANK	UNIVERSITY	DEGREE	RANK
	PARIZEK ROBERT J	100 SAGE STREET	BAY CITY	U MICHIGAN	ENGR	1	U MICHIGAN	ENGR	1
	PAYNE ROBERT B	1526 OAK STREET	MILES	U CAL BERK	ZOOL	2	U CAL BERK	ZOOL	2
	PETRIE TED E	821 DURANT	LANSING 15	MICH ST U	MATH	1	PRINCETON	MATH	1
	ROBERTSON WAYNE M	R R 2	FREMONT	CARN TECH	ENGR	3	HARVARD U	ENGR	3
	ROSS DAVID W	14348 ROSEMONT	DETROIT 23	HARVARD U	PHYS	2	HARVARD U	PHYS	2
	SHULTZ WENDELL A	1776 S BROADWAY	HASTINGS	U MICHIGAN	MATH	1	U CAL BERK	MATH	1
	SLOBIN DAN I	18242 MARK TWAIN AVE	DETROIT 35	HARVARD U	PSYC	2	HARVARD U	PSYC	2
	SMITH GENE E	2215 MILLER AVENUE	ANN ARBOR	U MICHIGAN	ENGR	3	U MICHIGAN	ENGR	3
	STREET JAMES R	5109 BEDFORD	DETROIT 24	U MICHIGAN	ENGR	3	U MICHIGAN	ENGR	3
	TERHUNE KENNETH W	1416 C SPARTAN VILL	EAST LANSING	MICH ST U	PSYC	3	MICH ST U	PSYC	3
	TRABASSO THOMAS R	533 ALBERT AVENUE	E LANSING	MICH ST U	PSYC	3	MICH ST U	PSYC	3
	TREDDO PAUL A	312 W DAVIS	ANN ARBOR	MICH ST U	PSYC	3	MICH ST U	PSYC	3
	VEECH WILLIAM A	110 MAPLEFIELD	PLEASANT RIDGE	PRINCETON	MATH	2	PRINCETON	MATH	2
	WEBSTER DALE A	2009 SUPERIOR	WYANDOTTE	U MICHIGAN	PHYS	3	U MICHIGAN	PHYS	3
	WESTERDALE THOMAS H	1740 UNION LAKE ROAD	PONTIAC	U FREIBURG	BCHEM	1	U CAL BERK	BCHEM	1
	WESTON ELIZABETH A	16196 SUNDERLAND RD	DETROIT 19	U MICHIGAN	BOTA	1	U MICHIGAN	BOTA	1
	WINKLER HERBERT H	32500 WAYBURN W	FARMINGTON	U ILLINOIS	BCHEM	2	U ILLINOIS	BCHEM	2
	WISER NATHAN	18024 WASHBURN	DETROIT 21	KENYON C	MDSC	1	HARVARD U	MDSC	1
	WOLF LARRY L	2809 JEFFERSON AVE	MIDLAND	U CHICAGO	ZOOL	3	U CHICAGO	ZOOL	3
	WOLVERTON FRANKLIN B	401 E MADISON	ANN ARBOR	U MICHIGAN	PHYS	1	U CAL BERK	PHYS	1
	WOOD RODNEY D	104 PLYMOUTH DRIVE	CHARLOTTE	U MICHIGAN	PHYS	1	U MICHIGAN	PHYS	1
	ZIER ROBERT E	19150 ANGLIN	DETROIT 34	NO WESTERN	ENGR	3	NO WESTERN	ENGR	3
				MIT	PHYS	2	MIT	PHYS	2
MINN	NAME	ADDRESS	CITY	UNIVERSITY	DEGREE	RANK	UNIVERSITY	DEGREE	RANK
	AHERN PATRICK R	2093B HOYT AVE WEST	ST PAUL 8	U MINN	MATH	2	U MINN	MATH	2
	ANSHUS BYRON E	5652 IRVING AVE S	MINNEAPOLIS 19	U MINN	ENGR	1	PRINCETON	ENGR	1
	ARNESON RICHARD M	3649 46 AVE SO	MINNEAPOLIS 6	DUKE U	ZOOL	2	DUKE U	ZOOL	2
	BERG JOHN C	4537 WILLISTON ROAD	HOPKINS	U CAL BERK	ENGR	2	U CAL BERK	ENGR	2
	BLACK MARY B	515 S E DELAWARE	MINNEAPOLIS 14	U MINN	ANTH	2	RADCLIFFE	ANTH	2
	COHEN ROBERT R	719 EAST SIXTH STREET	DULUTH 5	U MINN	ZOOL	1	MICH ST U	ZOOL	1
	COME RICHARD A	626 MONTCALM PL	ST PAUL 16	U MINN	PHYS	2	U CHICAGO	PHYS	2
	DEUTSCHE CRAIG W	1716 DUPONT AVE SO	MINNEAPOLIS 5	U CHICAGO	CHEM	2	HARVARD U	CHEM	2
	DRAZ EDWARD A	3817 FRANCE AVE SO	MINNEAPOLIS 16	HARVARD U	CHEM	1	U CHICAGO	CHEM	1
	ECKLUND STANLEY D	3448 LONGFELLOW	MINNEAPOLIS 7	CARLETON C	PHYS	1	HARVARD U	PHYS	1
	FRIEDMAN LAWRENCE B	617 1/2 E 5TH STREET	DULUTH 5	U MINN	CHEM	1	CAL TECH	CHEM	1

STATE	NAME	ADDRESS	PRESENT INST	FIELD	CHOSEN INST
MINN	FRIESTEDT DERT E	5016 HIGHLAND ROAD	MIT	MATH 3	MIT
	GAMELIN THEODORE W	4054 QUAIL AVE NO	U CAL BERK	MATH 2	U CAL BERK
	GORDON STANLEY L	R F D 2	U MINN	ENGR 1	PRINCETON
	GRANZBERG GARY R	1053 FAIRMOUNT	U MINN	ANTH 1	HARVARD U
	HAJICEK JAMES D	2400 PLEASANT AVE S	U MINN	PHYS 1	U MINN
	JANZEN DANIEL H	331 UNIV VILLAGE	U MINN	ZOOL 1	U CAL BERK
	JENSEN TIMOTHY B	6909 1ST AVE SO	U MINN	ENGR 1	PRINCETON
	LOKEN JAMES G	4549 17AVE SO	U MINN	PHYS 1	OXFORD U
	LOWRY THOMAS H	2617 DEAN BLVD	HARVARD U	CHEM 2	HARVARD U
	MCKENZIE DOUGLAS H	4415 COLFAX AVE SO	HARVARD U	ANTH 2	HARVARD U
	NEWMAN RILEY D	2218 DOSWELL AVENUE	REED C	PHYS 1	U CAL BERK
	PTASHNE MARK S	3900 XERES AVE SO	REED C	BPHY 1	HARVARD U
	PULKRABEK WILLARD W	1170 SHERBURNE AVE	U MINN	ENGR 1	U MINN
	RUSH KENT R	306 UNIV AVE S E	U MINN	CHEM 2	U MINN
	SCHLEINITZ HENRY M	23 W OXFORD ST	MIT	ENGR 1	MIT
	SCHULTZ GERALD E	5144 PARK AVE	U MICHIGAN	EART 2	U MICHIGAN
	SOMMER DAVID C	767 HERNEL DR	HARVARD U	MATH 2	HARVARD U
	SOUTHWICK DAVID L	810 NINTH STREET S W	JOHNS HOPK	EART 3	JOHNS HOPK
	STRYK ROBERT A	2095B FOLWELL ST	U MINN	PHYS 2	U MINN
	SWANSON STANLEY M	822 SIMPSON STREET	STANFORD U	PHYS 2	STANFORD U
	TAUER RITA J SIS	2004 RANDOLPH AVENUE	MIT	MATH 2	MIT
	THOMAS PAUL J	2075 JUNO AVE	ST MARYS C	BCHM 1	HARVARD U
	THURNAUER PETER G	1690 BOHLAND AVENUE	OXFORD U	PHYS 2	OXFORD U
	URITAM REIN A	611 8TH STREET S	CONCORDIA	PHYS 1	IOWA ST C
	WHITE ROSCOE B	6200 CONCORD AVE SO	PRINCETON	PHYS 3	PRINCETON
	WILLETT ROGER D	700 NEVADA STREET	IOWA ST C	CHEM 2	IOWA ST C
MISS	BALGORD WILLIAM D	102 LEA CIRCLE	U MISSOURI	EART 2	PENN ST U
	BROAD ANNE L	735 FAIRVIEW ST	AGNES SCOT	BIOL 1	STANFORD U
	MURPHY JAMES L	HIGHWAY 15 NO	SPRNG HILL	MATH 1	U TEXAS
	MURRILL PAUL W	RT 2 BOX 249	L S U	ENGR 2	L S U
	NAMKOONG GENE	3604 HANCOCK AVENUE	NO CAR ST	GENE 3	NO CAR ST
	ROGERS CECIL A JR	2219 N LAMAR STREET	MILLSAPS C	PSYC 1	U OREGON

MONT	IHLER GARRET M RENNE ROGER L VINCELETTE RICHARD R	317 FOURTH AVENUE MO R F D 2 2632 CLARK AVENUE	GREAT FALLS BOZEMAN BILLINGS	CAL TECH REED C STANFORD U	BCHM MATH EART	1 1 2	HARVARD U U CAL BERK STANFORD U
MO	BAILEY RICHARD C BERGMAN ROBERT K BRIDGER ROBERT F DOIG MARLYN L ECKERT CHARLES A ELSON ELLIOT L FORNEY G DAVID JR FRANKEL RICHARD B HERKSTROETER WILLIAM HIATT VIVIAN S JONES LEE B KREBS CHARLES J KWENTUS GERALD K LAUGHLIN PATRICK R MCMAHON LEE E MUNCH JOHN H MYERS WAYNE W NANCE JON R PARKHURST LAWRENCE J STONE HAROLD S	3929A FILLMORE 3 H UNIV HGTS 1123 MURPHY 3141 SANTA FE TERRACE 4399 MCPHERSON 5 GRANADA WAY 1 GLENVIEW ROAD 100 E STEWART 5416 THOLOZAN AVENUE 745 PADDOCK DR 508 COTTON AVE 3533 OAK HILL AVE 435 BURNS 221 NORTH GRAND BLVD 6204 OLEATHA 303 PLANTHURST RD 4108 UTAH STREET 2204 N DOUGLAS 415 E 74TH STREET 7507 BUCKINGHAM	ST LOUIS 16 COLUMBIA JOPLIN INDEPENDENCE ST LOUIS 8 LADUE 24 ST LOUIS 24 COLUMBIA ST LOUIS 9 FLORISSANT CARUTHERSVILLE ST LOUIS 16 KIRKWOOD 22 ST LOUIS 3 ST LOUIS 9 WEBSTER GROVES ST LOUIS 16 SPRINGFIELD KANSAS CITY 31 CLAYTON 5	WASH U STL U MISSOURI IOWA ST C U TUBINGEN MIT STANFORD U PRINCETON U MISSOURI U MUNICH LINDNWOD C MIT OXFORD U MIT ST LOUIS U HARVARD U U WISC C WOOSTER U ILLINOIS YALE U U CAL BERK	ENGR PHSL CHEM MATH ENGR BCHM ENGR CHEM CHEM ZOOLOG CHEM BIOL ENGR PSYC PSYC CHEM BCHM PHYS CHEM ENGR	1 2 3 1 2 2 1 1 1 2 3 2 2 2 1 2 2 2	STANFORD U U MISSOURI IOWA ST C U MICHIGAN U CAL BERK STANFORD U STANFORD U U CAL BERK CAL TECH WASH U STL MIT U BRIT COL MIT NO WESTERN HARVARD U U WISC U WISC U ILLINOIS YALE U U CAL BERK
NEBR	ANDERSEN JOHN P BAUER WILLIAM R BOLAR MARLIN L CASSEL DAVID G FRAHM RICHARD R GRADWOHL DAVID M MCARTHUR DONALD E	5106 CHICAGO STREET 902 W 4TH STREET 3305 P STREET 222 WEST 4TH STREET RT 1 1633 CRESTLINE 2943 GARFIELD	OMAHA 32 MCCOOK LINCOLN 10 AINSWORTH LYMAN LINCOLN LINCOLN	HARVARD U CAL TECH U NEBRASKA PRINCETON U NEBRASKA HARVARD U U NEBRASKA	MATH CHEM BOTA PRINCETON AGRI ANTH PHYS	2 1 3 1 2 3 2	HARVARD U HARVARD U U NEBRASKA PRINCETON U WISC HARVARD U U NEBRASKA

STATE	NAME	ADDRESS	PRESENT INST	FIELD		CHOSEN INST
				PHYS	1	MIT
NEBR	WRIGHT BRADFORD L	1021 ROBERT ROAD	LINCOLN 10	REED C		
NEV	SIBBALD GARTH M	219 WEST ARROYO ST	RENO	HARVARD U	SOSC 2	HARVARD U
N H	BROWN VERNE R ROBINSON PETER WING HAROLD C	KNOX MARSH ROAD 16 ALLEN STREET 101 MANCHESTER STREET	DOVER HANOVER CONCORD	U MICHIGAN HARVARD U U NEW HAMP	ENGR 2 EART 3 ENGR 1	U MICHIGAN HARVARD U MIT
N J	ANAGNOSTAKIS CHRISTO BENNETT JAMES H BERNER ROBERT A BURK CREIGHTON A CALDWELL DENNIS J CALLAN CURTIS G JR CARLSMITH JAMES M CASSIDY PATRICK J CHAIKEN JAN M COBURN STEPHEN P CONRAD PETER W DAVIS BRIAN T FAHNEY DAVID E FLEISCHMAN WILLIAM M FORREST HELEN F FRIEDMAN KENNETH A GEORGE ALBERT R JR GILL HELEN K GLASHAUSER CHARLES GRAF RONALD E HAND BRYCE M HARTUNG ROLF	33 GRADUATE COLLEGE 224A HARRISON STREET 175 GLENWOOD AVENUE 218 A MARSHALL AVE 20 SCHOOL LANE 22 NORTHVALE AVE 32 PARKVIEW TERRACE 90 E HIGHLAND AVE 2406 ST GEORGES AVE 9 VALEMONT WAY 30 HIGH STREET 221 A KING STREET 423 LEWIS STREET 151 SO MUNN AVENUE 52 WARFIELD STREET 221 RIVERVIEW AVE 400 B BUTLER AVENUE 493 WARWICK AVENUE 50 MIDLAND AVE 86 HOWARD AVENUE 240 FOWLER AVENUE 16 11 SPLIT ROCK RD	PRINCETON PRINCETON LEONIA PRINCETON PENNS GROVE LITTLE SILVER SUMMIT ATLANTIC HGLD RAHWAY SUMMIT E RUTHERFORD PRINCETON FORT LEE E ORANGE UPR MONTCLAIR HIGHLAND PARK PRINCETON W ENGLEWOOD GLEN RIDGE PASSAIC JERSEY CITY 5 FAIRLAWN	PRINCETON PRINCETON HARVARD U PRINCETON PRINCETON PRINCETON HAVERFORD HARVARD U ST PETERS MIT PURDUE U PRINCETON PRINCETON COLUMBIA U LEHIGH U RUTGERS U YALE U PRINCETON U CHICAGO BOSTON C PRINCETON U SO CALIF U MICHIGAN	MATH 2 MATH 3 EART 3 EART 2 CHEM 3 PHYS 1 PSYC 3 CHEM 1 PHYS 2 BCHM 2 ENGR 2 EART 2 BCHM 2 ZOO 3 PHYS 2 ENGR 2 BCHM 2 PHYS 1 PHYS 2 EART 2 ZOO 2	PRINCETON PRINCETON HARVARD U PRINCETON PRINCETON PRINCETON HARVARD U HARVARD U MIT PURDUE U PRINCETON PRINCETON COLUMBIA U LEHIGH U RUTGERS U YALE U PRINCETON U CHICAGO BOSTON C PRINCETON U SO CALIF U MICHIGAN

HAYS JAMES F	20 HAWTHORNE ROAD	SHORT HILLS	CAL TECH	EART	2	CAL TECH
HECHTEL MAUREEN A	123 FLORENCE AVE	IRVINGTON 11	SMITH C	MCBI	1	RUTGERS U
HINNERS NOEL W	222 FAIRMOUNT AVE	CHATHAM	PRINCETON	EART	2	PRINCETON
HOLZWARTH GEORGE M	522 BOULEVARD	WESTFIELD	HARVARD U	BPHY	2	HARVARD U
HUBER DAVID L	31 LAFAYETTE AVENUE	TOMS RIVER	HARVARD U	PHYS	2	HARVARD U
HUTCHINSON JOHN W	107 W COMMERCE ST	BRIDGETON	HARVARD U	ENGR	2	HARVARD U
JOHNSON JOSEPH L JR	856 VALLEY ROAD	UPR MONTCLAIR	U PARIS	MATH	2	U PARIS
KAYSER BORIS J	640 CROSS STREET	LAKEWOOD	CAL TECH	PHYS	2	CAL TECH
KEENAN EDWARD M	234 N 18TH STREET	E ORANGE	MIT	MATH	2	MIT
KENNEL JOHN G	30 BROADWAY	PT PLEASANT	PRINCETON	PHYS	2	PRINCETON
KOCH JOHN F	232 WOODCREST ROAD	OKAHURST	U CAL BERK	PHYS	3	U CAL BERK
KOVER WARNER B	48 HARVEY AVENUE	ROCHELLE PARK	CAL TECH	CHEM	2	CAL TECH
KREPS RODNEY E	6 1/2 NEWLIN ROAD	PRINCETON	PRINCETON	PHYS	2	PRINCETON
LAMOLA ANGELO A	357 NEW STREET	NEWARK 3	MIT	CHEM	1	U CAL BERK
LAWRENCE DAVID R	220 LEXINGTON AVE	PITMAN	JOHNS HOPK	EART	1	HARVARD U
LOWET DAVID B	555 WEST LINCOLN AVE	OKAHURST	LAFAYETTE	BPHY	1	U CHICAGO
MERRILL DEANE W JR	317 N RIDGEWOOD ROAD	S ORANGE	U CAL BERK	PHYS	2	U CAL BERK
MILLMAN MICHAEL G	17 FAIRVIEW AVENUE	SUMMIT	U CAL BERK	PHYS	2	U CAL BERK
MOLLOW BENJAMIN R	1957 AXTON AVENUE	UNION	HARVARD U	PHYS	2	HARVARD U
NOBLE JAMES J	KINGS ROAD	MT HOLLY	R P I	CHEM	1	MIT
PICARD MEREDITH D	226 B HARRISON STREET	PRINCETON	PRINCETON	EART	2	PRINCETON
PILLA MICHAEL A	36 REDFERN STREET	TRENTON 10	MIT	ENGR	2	MIT
POAGE JAMES F	52 WOODLAWN DR	MORRISTOWN	PRINCETON	ENGR	3	PRINCETON
PRICE BARBARA J	9 GOSSELIN AVENUE	PORT MONMOUTH	SMARTHMORE	ANTH	1	COLUMBIA U
ROGERS JOSEPH E JR	310 W SECOND STREET	MOORESTOWN	CORNELL U	CHEM	2	CORNELL U
SEYBOLD PAUL G	117 E HOMESTEAD AVE	COLLINGSWOOD	HARVARD U	BPHY	2	HARVARD U
SINNIS JAMES	613 HUDSON STREET	HOBOKEN	STEVENS IN	PHYS	3	STEVENS IN
STEVENS RICHARD M	820 HOPKINS AVE	AUDUBON 6	HARVARD U	CHEM	2	HARVARD U
THIESSEN HENRY A	380 E MADISON AVENUE	DUMONT	CAL TECH	PHYS	1	CAL TECH
ULLRICH FELIX T	31 COLUMBIA AVE	CROBKOP	RUTGERS U	PHYS	1	U ILLINOIS
VEZZETTI DAVID J	1127 WASHINGTON ST	HOBOKEN	STEVENS IN	PHYS	2	STEVENS IN
VILMS JURI	1302 2ND STREET	SEABROOK	STANFORD U	ENGR	2	STANFORD U
VINCZ GLORIA A	760 KING GEORGE ROAD	FORDS	U SHEFFLD	PHSL	2	RUTGERS U
WAGONER ROBERT V JR	1105 EMERSON AVENUE	W ENGLEWOOD	CORNELL U	ENGR	1	CORNELL U
YONKERS KATHERINE E	75 POLLARD ROAD	MOUNTAIN LAKES	DUKE U	BIOI	1	STANFORD U

STATE	NAME	ADDRESS	PRESENT INST	FIELD	CHOSEN INST	
N M	ATKINSON WILLIAM W BERGSTRESSER THOMAS DIEBOLD ROBERT E DOWDLE JOHN R EGBERT LARRE N ENRICH ROBERT L HARRIS ARTHUR H SHLAER WILLIAM J THOMPSON RICHARD S WALSH JOSEPH M	307 ARVADA AVE N E 739 42ND STREET RT 1 BOX 483 320 SOUTH ZINC 4477 C YUCCA STREET P O BOX 847 UNIV OF NEW MEXICO 1394 43 STREET 500 EAST YUCCA ST MICHAELS COLLEGE	U HAMBURG U CAL BERK CAL TECH U NOR CAR UTAH ST U U OREGON U NEW MEX HARVARD U CAL TECH U MARYLAND	EART 2 PHYS 2 PHYS 3 MATH 2 GENE 1 ANTH 3 ZOO 3 PHYS 1 PHYS 1 BCHM 3	HARVARD U U CAL BERK CAL TECH U NOR CAR UTAH ST U U OREGON U NEW MEX U CAL BERK HARVARD U U MARYLAND	
N Y	ALFF CYNTHIA E AUER HENRY E BARASH NAOMI E BARSHAY JACOB BATT RUSSELL H BAUM PAUL F BECK BERNARD BECKER MARTIN BERGER ROBERT BERNOLD STANLEY BISHOP ALISON BODE RAYMOND R BOYLAN EDWARD S BRAGG LINCOLN E BRAU CHARLES A BREGSTONE EDWARD BREINDEL BARRY BREINDEL PHILIP J BRESLAU MICHAEL BRODO IRWIN M CANN ROSS S CASEY KENNETH P COHEN NATALIE S	540 W 123RD STREET 27 LAKEVIEW ROAD 62 BAY 26 STREET 1362 E 13TH STREET 84 OAK STREET 644 RIVERSIDE DRIVE 2757 BARKER AVENUE 1765 3RD ST 39 MILBURN COURT 45 28 193 ST 903 WYCKOFF ROAD 11 MAUJER STREET 701 WEST 175 STREET 27 SCHOOL STREET 84 MALVERNE AVENUE 1497 CARROLL STREET 2225 HOLLAND AVE 4901 25AVENUE 67 EDGEHILL TERRACE 38 15 149TH ST 66 MONTAGUE STREET 32 51 78 STREET 82 14 268 STREET	NEW YORK 27 NEW ROCHELLE BROOKLYN 14 BROOKLYN JAMESTOWN NEW YORK 31 BRONX 67 NEW YORK 9 FREEPORT FLUSHING 58 ITHACA VALLEY STREAM NEW YORK 33 ORCHARD PARK MALVERNE BROOKLYN 13 NEW YORK 67 WOODSIDE 77 TROY NEW YORK 54 BROOKLYN 1 JACKSON HGTS FLORAL PK NYC	COLUMBIA U HARVARD U BARNARD C PRINCETON U CAL BERK PRINCETON PRINCETON MIT HARVARD U YALE U YALE U COLUMBIA U PRINCETON CARN TECH CORNELL U POLY BKLYN MIT ENGR 2 MANHATTAN R P I MICH ST U COLUMBIA U U WISC NEW YORK U	PHYS 2 BCHM 2 MATH 1 MATH 1 CHEM 2 MATH 3 SOSC 3 ENGR 2 ENGR 3 EART 3 ZOO 3 ENGR 1 MATH 3 MATH 2 ENGR 1 ENGR 1 ENGR 2 ENGR 1 ENGR 2 BOTA 2 EART 3 MATH 2 BIOL 2	COLUMBIA U HARVARD U CORNELL U BRANDEIS U U CAL BERK PRINCETON PRINCETON MIT HARVARD U YALE U YALE U MIT PRINCETON CARN TECH HARVARD U MIT MIT MIT R P I MICH ST U COLUMBIA U U WISC NEW YORK U

N Y	BOX 50 RFD 1	TROY	PHYS	2	HARVARD U
COOK DAVID M	6110 SALT ROAD	CLARENCE	MATH	1	MIT
COOK STEPHEN A	125 EASTLAND AVE	ROCHESTER 18	PHYS	1	PRINCETON
CORNWELL ROBERT G	427 W STATE ST	ITHACA	ANTH	2	AUSTALN U
CRIM DONALD E	434 84 STREET	BROOKLYN 9	PHYS	1	COLUMBIA U
DALY DANIEL F	5 WESTMINSTER ROAD	BROOKLYN 18	PHYS	1	HARVARD U
DANCIS JEROME	1872 DOVER ROAD	WANTAGH	PSYC	1	U MICHIGAN
DENSBURY DONALD A	2511 NEWKIRK AVE	BROOKLYN 26	ENGR	1	CAL TECH
DONNELLY JOSEPH P	4600 14 AVENUE	BROOKLYN	BOTA	1	YALE U
DORFMAN BEN ZION	3850 SEDGWICK AVENUE	NEW YORK 63	BPHY	2	MIT
DUSHMAN MIRIAM B	39 EMMETT PLACE	YONKERS 3	BPHY	2	CAL TECH
ECKHART WALTER	2949 FARROCKAWAY BLVD	FARROCKAWAY 91	PHYS	2	STANFORD U
EINBINDER HERBERT M	68 52 JUNO STREET	FOREST HILLS	PHYS	3	MIT
EISENBERG JUDAH M	2771 BAINBRIDGE AVE	NEW YORK 58	PHYS	2	COLUMBIA U
EISENSTEIN BOB I	75 WEBSTER STREET	MALVERNE	EART	2	COLUMBIA U
ENGELS JOAN C	1585 MORRIS AVE	BROXN 57	MATH	1	HARVARD U
FALTZ LEONARD M	4411 CHURCH AVENUE	BROOKLYN 3	MATH	1	HARVARD U
FEIN BURTON I	1717 CARROLL STREET	BROOKLYN 13	PHYS	3	CORNELL U
FELDMAN MARTIN	105 SHAVER AVE	NO SYRACUSE 12	CHEM	1	HARVARD U
FENNESSEY JAMES P	2256 BURDETT AVE	TROY	PHYS	1	HARVARD U
FETZ EBERHARD E	481 EAST 167 STREET	BROXN 56	ENGR	3	HARVARD U
FINE TERENCE L	232 EAST 169 STREET	NEW YORK 56	PHYS	2	HARVARD U
FRANCO VICTOR	1354 E 7 STREET	BROOKLYN 30	CHEM	3	COLUMBIA U
FREED JACK H	472 EAST 48 ST	BROOKLYN 3	ENGR	2	U CAL BERK
FREY JEFFREY I	1185 PARK AVENUE	NEW YORK 28	PHYS	2	COLUMBIA U
FRIEDBERG RICHARD M	1169 E NY AVENUE	BROOKLYN 12	MATH	1	U CAL BERK
FRIEDMAN DAVID	208 ROGERS AVENUE	BROOKLYN 25	SOSC	3	HARVARD U
FRUCHTBAUM HAROLD	99 5762ND DR	REGO PARK 74	MATH	1	COLUMBIA U
GASTWIRTH JOSEPH L	69 47 NANSEN STREET	FOREST HILLS	MATH	1	RADCLIFFE
GEIST GRACE E	WEST MAIN ST	SPRINGVILLE	CHEM	1	U CAL BERK
GENTNER DONALD R	399 SIXTEENTH ST	BROOKLYN 15	MATH	2	YALE U
GEOGHAN ROBERT E	2030 BAKER AVENUE	UTICA 3	MATH	1	MIT
GERSTEN STEPHEN M	2258 OCEAN AVENUE	BROOKLYN 29	MATH	1	HARVARD U
GEWIRTZ STEPHEN J	70 LA SALLE ST	NEW YORK 27	PHYS	2	PRINCETON
GEZELTER JOSEPH	155 EAST 76 STREET	NEW YORK 21	PHYS	2	STANFORD U
GINSBERG EDWARD S	110 36 67TH RD	FOREST HILLS	MATH	1	YESHIVA U
GINSBERG JONATHAN I					

STATE	NAME	ADDRESS	PRESENT INST	FIELD	CHOSEN INST
N Y	GLAUBERMAN GEORGE	107 56 LEFFERTS BLVD	POLY BKLYN	MATH 1	HARVARD U
	GLAUBIGER DANIEL L	3849 BEDFORD AVE	HARVARD U	MATH 1	U CAL BERK
	GOLDIN KENNETH D	590 BARD AVE	PRINCETON	SOSC 1	STANFORD U
	GOLDHABER ALFRED S	91 S GILLETTE AVENUE	HARVARD U	PHYS 1	U CAL BERK
	GOLDMAN JAY R	760 WYONA STREET	BROOKLYN C	MATH 1	PRINCETON
	GOLDSTEIN ROBERT	130 46 123 ST	CAL TECH	ENGR 2	CAL TECH
	GOLUB ROBERT	2630 KINGSBRIDGE TER	MIT	PHYS 2	MIT
	GOODMAN JOHN M	PLEASANT GROVE APTS	CORNELL U	PHYS 2	CORNELL U
	GOTTLIEB JOAN A	1730 CARROLL ST	BARNARD C	MATH 1	NEW YORK U
	GRAPPEL SARAH F	2 DODWORTH STREET	RUTGERS U	MCBI 1	RUTGERS U
	GREEN MICHAEL E	225 EASTERN PKY	YALE U	BCHM 1	YALE U
	GREENEBAUM MICHAEL	1241 55TH STREET	YESHIVA U	PHYS 1	MIT
	GREIBACH SHEILA A	80 PRYER TERRACE	RADCLIFFE	MATH 2	RADCLIFFE
	GROSSBERG STEPHEN	35 15 75 STREET	DARTMOUTH	MATH 1	STANFORD U
	GROSSMAN DAVID D	100 LASALLE STREET	HARVARD U	PHYS 1	PRINCETON
	GUNTHER LEON	1222 E 104 STREET	MIT	PHYS 2	MIT
	HALPERIN BERTRAND I	KIRKLAND HOUSE L 42	HARVARD U	PHYS 1	HARVARD U
	HANDEL DAVID	44 65 KISSENA BLVD	U CHICAGO	MATH 2	U CHICAGO
	HARRIS CHARLES S	85 FAIRVIEW AVENUE	HARVARD U	PSYC 3	HARVARD U
	HAVENDER WILLIAM R	323 EAST 234 ST	CORNELL U	GENE 1	CAL TECH
	HECKEL PHILIP H	181 OAK LANE	RICE INST	EART 2	RICE INST
	HEIKO LANCE K	787 CROTONA PK N	QUEENS C	PHYS 1	U CAL BERK
	HEILWEIL BERNARD H	3850 SEDGWICK AVE	COOPER UNI	ENGR 1	MIT
	HEIMBURG RICHARD W	15 ELMWOOD PARK SO	U ILLINOIS	ENGR 2	U ILLINOIS
	HERZOG STANLEY	817 E 175 STREET	MIT	ENGR 3	MIT
	HICKS NANCY E	37 BELFAST AVENUE	MT ST VINC	PHYS 1	RADCLIFFE
	HILL CHARLES G JR	316 ROWAN STREET	MIT	ENGR 3	MIT
	HIRSCH ELI	1574 54 STREET	BROOKLYN C	SOSC 1	NEW YORK U
	HOLTZMAN ERIC	1899 HARRISON AVE	COLUMBIA U	ZOOL 2	COLUMBIA U
	HOLZSAGER RICHARD A	175 PINEHURST AVE	COLUMBIA U	MATH 1	HARVARD U
	HYLAND MICHAEL J	3360 FT INDEPENDENCE	MANHATTAN	ENGR 1	POLY BKLYN
	HYMAN EMILE	65 88 162 STREET	COLUMBIA U	PHYS 1	COLUMBIA U
	INKLES DAVID M	27 HERRICK DRIVE	U PENN	SOSC 2	U PENN
	IRVING DAVID C	C/O LEO CUSHMAN	U PENN	PHYS 1	CAL TECH
	ISAACS IRVING M	1051 ELDER AVENUE	HARVARD U	MATH 2	HARVARD U
	JAFFE ARTHUR M	202 HIGHBROOK AVE	CAMBRIDGE U	PHYS 1	PRINCETON

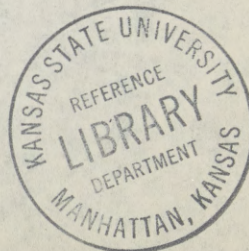
STATE	NAME	ADDRESS	PRESENT INST	FIELD	CHSEN INST
N Y	MCCARTHY DONALD J	493 PROSPECT PLACE	MANHATTAN	MATH	NEW YORK U
	MCGUIRE ODELL S	217 WOODBINE AVE	U ILLINOIS	EART	U ILLINOIS
	MEININGHAUS ARLYN R	6060 BROADWAY	NO WESTERN	CHEM	NO WESTERN
	MEYERS CHARLES J	20 MAGAW PL	HARVARD U	PSYC	HARVARD U
	MICHAEL JOE V	33 HIGHLAND AVENUE	U ROCHESTER	CHEM	U ROCHESTER
	MIKE JOHN C	144 40 38TH AVE	FORDHAM U	PHYS	PRINCETON
	MILLER EDWARD J	1800 CLINTON AVE S0	U ROCHESTER	BPHY	U ROCHESTER
	MILLER JOHN C	80 GRASHERE RD	HARVARD U	MATH	COLUMBIA U
	MILLER RICHARD C	2459 RUTLER ST	R P I	ENGR	PURDUE U
	MOLDOVER MICHAEL R	3850 SEDGWICK AVENUE	R P I	PHYS	HARVARD U
	MOLSIK FREDERICK I	67 25 DARTMOUTH ST	BROWN U	PHYS	BROWN U
	MOSHER CHARLES H	51 WASHINGTON ROAD	CORNELL U	ENGR	CORNELL U
	MULLER RICHARD L	1666 PUTNAM AVE	QUEENS C	CHEM	CORNELL U
	NEWMAN FRED M	144 28 MELBOURNE AVE	CITY C N Y	MATH	HARVARD U
	NEWMAN GABRIELLE C	1 METROPOLITAN OVAL	BRANDEIS U	PHYS	MIT
	OBRIEN JOHN A	27 RONALD AVENUE	MIT	SOSC	MIT
	O'CONNELL WILLIAM J	543 4TH ST	STATEN ISLAND	ENGR	MIT
	ORMAN JUDITH A	150 40 71 AVENUE	BROOKLYN 15	PHYS	PRINCETON
	OSTON STEVEN G	35 19 200TH ST	FLUSHING 67	PHYS	U MICHIGAN
	PALKA YVONNE S	40 09 35TH AVE	BAYSIDE 61	ENGR	MIT
	PARKER WILLIAM L	45 FOUNTAIN ST	JACKSON HGTS	MIT	RADCLIFFE
	PARSEGIAN VOZKEN A	BRUNSWICK HILLS RT 57	TROY	ZOOL	HARVARD U
	PASSMAN DONALD S	2379 CRESTON AVENUE	BROOKLYN 68	CHEM	HARVARD U
	PERRIN ROBERT P	1420 WOOD ROAD	NEW YORK 62	BPHY	HARVARD U
	PIRKLE WILLIAM H	10 TERRACE PARK	ROCHESTER	MATH	HARVARD U
	PLATEK RICHARD A	4800 14 AVE	BROOKLYN 19	PHYS	CAL TECH
	PLOWS WILLIAM H	48 91 187TH STREET	FLUSHING 65	CHEM	U ROCHESTER
	POLLACK HELEN S	2197 CRUGER	NEW YORK 62	MATH	U CAL BERK
	POLLACK JAMES B	363 CHURCH AVENUE	WOODMERE	PSYC	U CAL BERK
	POLLATSEK ALEXANDER	622 E 20TH ST	NEW YORK 9	PHYS	YALE U
	PRESS MARK	1753 53 ST	BROOKLYN 4	CHEM	COLUMBIA U
	PRILL DAVID D	4162 BAILEY AVE	BUFFALO 26	MATH	PRINCETON
	RADKOWSKI ALFRED F	1696 SECOND AVE	NEW YORK 28	PHYS	CORNELL U
	RALEIGH EDWARD W	1010 HANSHAW ROAD	ITHACA	CHEM	CORNELL U
	RAPP WILLIAM V	325 EAST 72 STREET	NEW YORK 18	SOSC	MIT
	REYNOLDS JOSEPH BRO	HILLSIDE HALL BOX 174	TROY	ENGR	R P I

STATE	NAME	ADDRESS	PRESENT INST	FIELD	CHOSEN INST
N Y	TITTERTON PAUL J	94 FAIRVIEW ROAD	FARMINGDALE LI	PHYS 1	BRANDEIS U
	TOWELL DAVID G	FILLMORE	MIT	EART 3	MIT
	VALLEE JAMES A	420 MAIN STREET	ORISKANY	BIOL 2	U MIAMI
	VOGEL STEVEN	14 VAN NISS ROAD	BEACON	ZOOL 1	HARVARD U
	WEBB JULIAN P	290 HOLLYWOOD AVE	ROCHESTER 18	PHYS 3	STANFORD U
	WEINER ROBERT A	1040 UNION ST	BROOKLYN 25	PHYS 1	HARVARD U
	WEINMAN ROBERT W	643 MONTGOMERY STREET	BROOKLYN 25	PHYS 2	CAL TECH
	WEISBERGER WILLIAM I	2 RIDGECREST WEST	SCARSDALE	PHYS 2	MIT
	WEISSTEIN NAOMI	473 WEST END AVE	NEW YORK 24	PSYC 1	HARVARD U
	WOJCIK JOHN F	185 CORNELL QTRS	ITHACA	CHEM 2	CORNELL U
	WOJTASZEK JOSEPH H	4 PORTSMOUTH TER	ROCHESTER 7	PHYS 2	U ROCHESTER
	WORTIS MICHAEL	145 E 74 STREET	NEW YORK 21	PHYS 3	HARVARD U
	WRATTEN CRAIG C	325 HUXLEY DR	SNYDER 26	BCHEM 2	U WISC
	WRIGHT JACKSON S	320 EAST 176 ST	BRONX 57	MATH 1	MIT
	ZWENGROWSKI PETER D	413 GRAND STREET	NEW YORK 2	MATH 2	U CHICAGO
	ZWILLENBERG MELVIN L	836 CROWN STREET	BROOKLYN 13	ENGR 2	PRINCETON
N C	BARKER ROBERT H	109 MASON FARM ROAD	CHAPEL HILL	CHEM 2	U NOR CAR
	BRIITAIN JERE A	BOX 88	HORSE SHOE	AGRI 1	CORNELL U
	CARLTON TERRY S	703 PIEDMONT STREET	REIDSVILLE	CHEM 2	U CAL BERK
	CROWDER BILLY L	4237 PRINCETON AVE	GREENSBORO	CHEM 3	CORNELL U
	DAVIS HOWARD T	ROUTE 1	HENDERSONVILLE	CHEM 3	U CHICAGO
	GARRISON DAVID Q	ROUTE 3 BOX 382	CHARLOTTE 3	MATH 1	HARVARD U
	GIBBS HYATT M	BOX 310	N WILKESBORO	PHYS 2	U CAL BERK
	GRIFFITHS PHILLIP A	822 CHAMBERLIN STREET	RALEIGH	MATH 3	PRINCETON
	HAPPER WILLIAM JR	205 WOODSWAY LANE	LENOIR	PHYS 2	PRINCETON
	JONES THOMAS L	532 COUNTRY CLUB ROAD	BREVARD	ENGR 1	MIT
	KOLODY WILLIAM P	1121 BARKLEY ROAD	CHARLOTTE	MATH 1	CAL TECH
	KOWAL NORMAN E	BOX 6875 COLLEGE STA	DURHAM	BOTA 3	DUKE U
	MARK FRANCES G	410 1/2 W MARKHAM AVE	DURHAM	CHEM 3	DUKE U
	MINK LAWRENCE A	RT 1 BOX 288	WINSTON SALEM	PHYS 2	NO CAR ST
	ROBERTS BRYAN W	BOX 685	HILLSBORO	CHEM 2	STANFORD U
	RUSH LEWIS O JR	402 SILVER AVENUE	ASHEBORO	MATH 1	U MICHIGAN

M D	R R 2	9 DELL WAY	MARION MAYVILLE VOLTARE MINOT	STANFORD U PRINCETON U WISC INDIANA U	ENGR CHEM CHEM EART	2 3 2 3	STANFORD U PRINCETON U WISC INDIANA U
SCHEIBE PAUL O SPANDE THOMAS F THOMPSON BETTY C UTGAARD JOHN E							
OHIO							
ADMAN RAYMOND L ANKENBRANDT CHARLES ARGUS CAROL J BARGER JAMES E BEAN ANITA M BLOOM SANFORD G BRABSON BENNET B BRIGHT MARY A CARPENTER RICHARD N CHANEY ROBIN W CONNOR DANIEL S COOPER PAUL D DIXON ROBERT D ELLIS DAVID G FARISON JAMES B FLETCHER JOSEPH A JR FLOMENHOFT HUBERT I FRANKS DORIS J GINAVEN ROBERT O GLIESER LEON J GORDON ROY G GREENBERG WILLIAM M HAMILTON JOHN T HAMMER LOIS R HEINZ RICHARD M HEMPFLING WALTER P HOLMES FREDERIC L HORN WILLIAM A HRIBAR JOHN R	2500 UHL COURT 2170 MAPLEWOOD 1399 CAMBRIDGE BLVD 728 ST ANDREWS DR BOX 86 31 S HAMILTON ROAD 1214 HURD AVENUE 1014 W NORTH 2201 CUMMINGTON RD 43 BREVOORT ROAD 14625 CALDWELL AVENUE 1060 BEECHVIEW DRIVE 1635 WESTWOOD AVE 105 SCAMMEL STREET R R 1 BOX 52 1620 27TH ST N W 1563 GENOA PLACE RT 1 338 DELAWARE AVENUE 3604 LANSLOWNE 1404 WESTVALE AVE 3602 MAXWELL ROAD 507 CHAUCEY RD 139 DAYTON STREET 818 GENEVA AVE 2611 PANCOAST AVENUE 6515 BLUERIDGE AVE 1925 DALE ROAD RFD 1	DAYTON 20 CLEVELAND 18 COLUMBUS 12 TOLEDO YELLOW SPRINGS COLUMBUS 13 FINDLAY LIMA CLEVELAND 6 COLUMBUS 14 CLEVELAND 11 WORTHINGTON COLUMBUS 12 MARIETTA MCCLURE CANTON COLUMBUS 13 DOVER AKRON 3 CINCINNATI 36 AKRON 13 TOLEDO 13 DAYTON 31 YELLOW SPRINGS TOLEDO 9 CINCINNATI 11 CINCINNATI 13 CINCINNATI 37 MADISON	OHIO U ST LOUIS U STANFORD U HARVARD U ANTIOCH C OHIO ST U MIT OHIO ST U CASE INST OHIO ST U U WASH U GEORGIA OHIO ST U CORNELL U STANFORD U PURDUE U MIT OTERBEIN C OHIO WESL STANFORD U HARVARD U U MICHIGAN OXFORD U OHIO ST U U TOLEDO YALE U HARVARD U U CINN CAL TECH	BCHM PHYS PHYS ENGR GENE ENGR PHYS MATH CHEM MATH CHEM EART MATH PHYS ENGR ENGR ENGR ZOOLOGY PHYS MATH PHYS PHYS PHYS PSYC PHYS MCBI SOSC MATH ENGR	1 1 2 2 1 3 2 1 3 2 2 2 2 1 2 1 2 1 2 2 2 2 1 3 3 2 1	COLUMBIA U U CAL BERK STANFORD U HARVARD U U CAL BERK OHIO ST U MIT RADCLIFFE CASE INST OHIO ST U U WASH U GEORGIA OHIO ST U CORNELL U STANFORD U PURDUE U SWISS FED WASH U STL MIT STANFORD U HARVARD U U MICHIGAN HARVARD U RADCLIFFE U MICHIGAN YALE U HARVARD U U CAL BERK CAL TECH	

OHIO	TAYLOR LYNN J	1863 18TH STREET	CUYAHOGA FALLS	MIT	CHEM	MIT
	TSCHANZ JOHN F	947 NORTH W STREET	LIMA	OHIO ST U	PHYS	OHIO ST U
	VAN FLANDERN MARGUER	3944 AVILLA PL	NORWOOD 12	ST LOUIS U	PHYS	U CAL BERT
	VANDENEYNDEN CHARLES	4226 SULLIVAN AVENUE	ST BERNARD 17	U OREGON	MATH	U OREGON
	WILCOX JOHN P	47 DELAND AVE	COLUMBUS 14	OHIO ST U	ENGR	OHIO ST U
	WILLIAMS FRANCIS D	540 YARONIA DRIVE	COLUMBUS 14	U WISC	MATH	U WISC
	WILSON JOHN E	623 N MAIN STREET	CELINA	U NOTRE D	BCHM	U ILLINOIS
	ZARE RICHARD N	4327 SILSBY RD	UNIVERSITY HTS	HARVARD U	CHEM	U CAL BERT
	ZAVORTINK THOMAS J	345 N PROSPECT ST	RAVENNA	KENT ST U	BOTA	FLA ST U

OKLA	BUTLER LARRY G	ROUTE 1	OCHELATA	U MINN	BCHM	U MINN
	CLARKE ROBERT F	1810 MELROSE DR	NORMAN	U OKLAHOMA	ZOOL	U OKLAHOMA
	COOPER JANE E	1540 SO COLUMBIA AVE	TULSA 4	U PENN	ZOOL	U PENN
	FAUDREE RALPH J	119 EAST 3RD STREET	ATOKA	OKLA BAPT	MATH	PURDUE U
	GERLACH CHARLES R	41 PARK PLACE	GUTHRIE	OKLA ST U	ENGR	OKLA ST U
	GILBERT M CHARLES	5 SO 18TH STREET	LAWTON	U C L A	EART	U C L A
	GOLDWYN ROGER M	4321 EAST 52ND STREET	TULSA 35	HARVARD U	ENGR	HARVARD U
	GRUVER GEORGE W	624 N KNOBLOCK	STILLWATER	OKLA ST U	ENGR	OKLA ST U
	HURST GERALD L	RT 2 BOX 190	JONES	CAMBRIDGE U	CHEM	CAMBRIDGE U
	KELLY SUZANNE SIS	2216 E 30TH ST	TULSA 14	U OKLAHOMA	SOSC	U OKLAHOMA
	KIRKSE DALE W	RR 4 BOX 124	ALVA	IOWA ST C	ENGR	IOWA ST U
	LIPE WILLIAM D	430 WEST FIFTH	BRISTOW	YALE U	ENGR	YALE U
	MURRAY FREDERICK N	1211 S COLLEGE	TULSA 4	U COLORADO	EART	U COLORADO
	OLDHAM IRA B III	426 N 6TH ST	MUSKOGEE	CARN TECH	ENGR	CARN TECH
	PAGE LEROY E	710 CULBERTSON DRIVE	OKLAHOMA CITY	U OKLAHOMA	SOSC	U OKLAHOMA
	PAUL JOHNNY C	1171/2 E WALNUT	FAIRVIEW	OKLA ST U	ENGR	OKLA ST U
	PONSOR KENNETH C	1715 N W 38TH	OKLAHOMA CITY	CORNELL U	ENGR	CORNELL U
	PROPHET CARL W	507 FLEETWOOD DRIVE	NORMAN	U OKLAHOMA	ZOOL	U OKLAHOMA
	REINHARDT WILLIAM N	2012 OSAGE	BARTLESVILLE	C WOOSTER	MATH	HARVARD U
	ROBINSON ROBERT L JR	324 NORTH G STREET	MUSKOGEE	OKLA ST U	ENGR	OKLA ST U
	SANMANN EVERETT E		GERONIMO	U OKLAHOMA	PHYS	U OKLAHOMA
	SMITH WARREN L	BOX 4141 W W C	NORMAN	U OKLAHOMA	ZOOL	U OKLAHOMA
	TECH JACK L	1221 N FRANCIS	OKLAHOMA CITY	HARVARD U	ASTR	HARVARD U
	THACH ROBERT E	701 N E 50	OKLAHOMA CITY	PRINCETON	BPHY	HARVARD U



STATE	NAME	ADDRESS	PRESENT INST	FIELD	CHSEN INST
OKLA	WOLFE JAMES F WOOD DAVID E	2105 N W 60TH 617 N FIRST	U OKLAHOMA CAL TECH	ENGR 1 CHEM 2	U OKLAHOMA CAL TECH
OREG	ANDREWS GEORGE E BIRD KENNETH J BROWN ROBERT B CHAMPION JOHN C DIXON RICHARD W HARRIS DAVID O HITCHCOCK DICKEY LYNN ELIZABETH MACINTYRE ROSS J MCNEAL BRIAN L MORSE HOWARD C MOURSUND ANNE L MOURSUND DAVID G POOLE MICHAEL G RINARD GILBERT A SATHER CLIFFORD A STOUT EDGAR L	RTE 5 BOX 401 4751 LAUREL AVENUE 1906 S E 29TH STREET ROUTE 2 BOX 75B 791 N SIXTH STREET 2819 ORCHARD STREET 1357 VISTA TERRACE 2280 SO LOUIS LANE 101 SOUTH 1651 KINGS ROAD 1953 MOSS STREET 1953 MOSS ROUTE 1 BOX 313 215 S COLLEGE ST 2323 N E SCHUYLER 2407 STRINGER GAP RD	CAMBRIDGE U OREGON ST U CHICAGO OREGON HARVARD U OREGON ST OREGON ST OREGON ST U OREGON JOHNS HOPK OREGON ST GEO FOX C U OREGON U WISC OREGON ST GEO FOX C REED C U WISC	MATH 2 EART 1 MATH 2 PHSL 1 ENGR 2 CHEM 1 ENGR 1 PSYC 3 GENE 2 AGRI 2 BIOL 1 CHEM 1 MATH 2 MATH 1 PHSL 1 ANTH 1 MATH 2	U ILLINOIS U WISC U CHICAGO U WASH HARVARD U U CAL BERK STANFORD U U OREGON JOHNS HOPK PURDUE U OREGON ST BROWN U U WISC U CAL BERK OREGON ST HARVARD U U WISC
PA	ADAIR WILLIAM R ADLER RONALD J ANDERSON JAMES B BARR MICHAEL BEATTIE JAMES K BERMON STUART BEUSCH JOHN U BICKING LEWIS A BRAUMAN JOHN I BRODSKY ALAN R BURNHAM DAVID C	100 W TENTH AVENUE 46 GREENLEE ROAD 315 HILLCREST AVENUE 714 BLYTHE AVENUE 738 GRANDVIEW ROAD 1458 LEVICK STREET 1616 KUNTZ ROAD 38 RIDGE AVENUE 5644 SOLWAY STREET 112 HAVERFORD ROAD 475 MORRISON DR	R P I STANFORD U PRINCETON U PENN PRINCETON U ILLINOIS ROCH I TEC U PENN U CAL BERK MIT PRINCETON	ENGR 1 PHYS 2 MATH 2 MATH 3 CHEM 1 PHYS 2 ENGR 1 BPHY 1 CHEM 3 MATH 2 PHYS 1	R P I STANFORD U PRINCETON U PENN U WISC U ILLINOIS MIT JOHNS HOPK U CAL BERK MIT HARVARD U

PA		900 WOODS ROAD	SOUTHAMPTON	ANTIOCH C	BPHY		MIT
CAPECCHI MARIO R		32 COLLEGE AVE	SWARTHMORE	SWARTHMORE	CHEM	1	MIT
CARROLL ALICE H		162 W GLENTAY RD	LANSDOWNE	U ILLINOIS	CHEM	1	U PENN
CHILTON WILLIAM S			GLEN CAMPBELL	STANFORD U	EART	3	U ILLINOIS
CLARK JOSEPH C		204 E HAMILTON AVE	PENNE COLLEGE	SWARTHMORE	SOSC	1	STANFORD U
DEMKO GEORGE J		686 N MAIN ST EXT	MEADVILLE	FLA ST U	ZOOL	1	PENN ST U
EDWARDS DALLAS C		728 S GEORGE ST	YORK	PRINCETON	GENE	2	U CHICAGO
EPLER JAMES L		408 TURNER RD	MEDIA 29	FLA ST U	ENGR	1	FLA ST U
FARKAS EDWARD J		322 SO 21ST STREET	PHILADELPHIA 3	PRINCETON	ENGR	1	MIT
FETTER ALEXANDER L		8062 FAYETTE ST	PHILADELPHIA	DREXEL INS	PHYS	1	HARVARD U
FOW BENJAMIN R		131 VERNON DRIVE	POTTSTOWN 28	MIT	MTRL	1	MIT
FRASER MALCOLM D		218 DIAMOND STREET	POTTSTOWN	MIT	ENGR	2	MIT
GARVINE RICHARD W		2323 WICKLYN ROAD	LANCASTER	PENN ST U	ENGR	1	MIT
GASTON CHARLES A		RD 1	ZIONSVILLE	INDIANA U	ENGR	1	PURDUE U
GEISSINGER LADNOR D		4209 N REESE ST	PHILADELPHIA	DREXEL INS	MATH	2	INDIANA U
GIMPEL JAMES F		171 GRAMERCY RD	BALA CYNWYD	U PENN	MATH	1	PRINCETON
GINTIS HERBERT M		403 BEAVER STREET	MILTON	YALE U	BPHY	2	U PARIS
GRAY DONALD M		1007 THEONA STREET	PITTSBURGH 10	U MINN	PHYS	2	YALE U
GREAVES JAMES R		121 RHINE PLACE APT 1	PITTSBURGH 12	U PITT	MDSC	3	U MINN
HALLIDAY ROBERT P		1334 N SHERIDAN AVE	PITTSBURGH 6	CARN TECH	SOSC	2	U PITT
HAMBURGER MICHAEL J		40 OVERBROOK PKWY	PHILADELPHIA	MIT	ENGR	2	CARN TECH
HARTENBAUM BRUCE		264 BURROWS STREET	PITTSBURGH 13	CARN TECH	CHEM	3	MIT
HAUK PETER		1266 LAKEMONT DRIVE	PITTSBURGH 16	CARN TECH	CHEM	3	CARN TECH
HILL VICTOR E		2812 LIVINGSTON ST	ALLENTOWN	CARN TECH	MATH	1	CARN TECH
HOFFMAN DONALD B JR		513 LINDEN ROAD	UNIV PARK	MUHLNBERG	BPHY	1	U WISC
HOROWITZ DANIEL H		869 MAYFIELD ROAD	SHARPSVILLE	PENN ST U	EART	2	YALE U
HORSTMAN CLIFFORD C		N ORANGE STREET	MEDIA	PRINCETON	ENGR	2	PENN ST U
HOUGHTON DAVID D		1430 MARKLEY STREET	MORRISTOWN	U WASH	MTRL	2	PRINCETON
HUDOCK GEORGE A		COLLEGE PARK	LEWISBURG	HARVARD U	GENE	2	U WASH
HUMPHREYS RICHARD F		SETON HILL	GREENSBURG	U DELAWARE	ENGR	1	HARVARD U
INFANGER ANN M SIS		4300 SPRUCE STREET	PHILADELPHIA 4	CORNELL U	GENE	3	ILLINOIS
JAMES ELSTIE L		6605 LOTUS ROAD	PHILADELPHIA	U PENN	CHEM	3	CORNELL U
JEROME JOSEPH W		5807 N CAMAC ST	PHILADELPHIA	ST JOS PA	MATH	1	U PENN
KALME CHARLES I		928 IRVIN ROAD	HUNTINGDON VAL	U PENN	MATH	1	PURDUE U
KAUFFMAN JOEL M		5309 DELMAR DRIVE	CLIFTON HGTS	MIT	CHEM	3	PRINCETON
KAUFMANN HARRY		49 HIRST AVE	E LANSDOWNE	U PENN	PSYC	3	MIT
KONRAD KARL W				TEMPLE U	PSYC	1	TEMPLE U

STATE	NAME	ADDRESS	PRESENT INST	FIELD	CHOSEN INST
PA	KRALL ALLAN M	346 EAST IRVIN AVENUE	U VIRGINIA	MATH 2	U VIRGINIA
	KRANTZ DAVID H	511 SO 42ND STREET	U PENN	PSYC 2	U PENN
	KREISS PAUL H	SWARTHMORE COLLEGE	SWARTHMORE	ZOOL 1	U CAL BERK
	KUNTZ ROBERT R	617 ST JAMES	PITTSBURGH 32	CHEM 2	CARN TECH
	LARKIN FRANCIS P	19 W MAIN STREET	MIDDLETOWN	MATH 2	PRINCETON
	LARSON RICHARD G	2136 CHANDLER STREET	PHILADELPHIA	MATH 1	U CHICAGO
	LAVINE RICHARD B	2934 ORCHARD LANE	HUNTINGDON VAL	MATH 1	MIT
	LEWIS RONALD M	331 W COLLEGE AVENUE	STATE COLLEGE	MATH 1	MIT
	MAYER RAYMOND A JR	2454 79TH AVE	PHILADELPHIA	EART 3	PENN ST U
	MCGRADY M MERCY SIS	3333 FIFTH AVENUE	PHILADELPHIA	MATH 3	COLUMBIA U
	MCMUTT DOUGLAS P	1029 FOULKROD STREET	PITTSBURGH 13	CHEM 2	U MINN
	MEKUS RICHARD H	3505 BARING STREET	PHILADELPHIA	PHYS 3	U WISC
	MOORE JOHN W	30 CHETWYND RD	PAOLI	MCBI 1	U PENN
	MORAN PAUL R	23 WOODLAWN AVENUE	COUDERSPORT	CHEM 1	PRINCETON
	MORRIS ROBERT A	3014 UNRUH AVENUE	PHILADELPHIA	PHYS 3	CORNELL U
	MOYER ROBERT D	806 VALLEY VIEW APTS	ALLENTOWN	PHYS 1	HARVARD U
	NAUMANN DOROTHY C	7905 WINSTON ROAD	PHILADELPHIA	MATH 2	U CAL BERK
	NOBLE ROBERT W JR	2106 CHESTNUT AVENUE	ARDMORE	BCHM 1	U CAL BERK
	ODONNELL PATRICIA A	141 W THIRD AVENUE	CONSHOHOCKEN	BPHY 2	MIT
	ORNSTON LEO N	415 DRESHER RD	HORSHAM	CHEM 1	U PENN
	PHILIPS THOMAS O	1 THE KNOLL	LANSDOWNE	BCHM 1	U CAL BERK
	RABIGER DOROTHY J	517 BOYER RD	CHLSTENHAM	PHYS 2	PRINCETON
	RAUB WILLIAM F	3 KIRMAR TERRACE	ALDEN STATION	CHEM 3	U PENN
	RAUCH FRANCIS C	3966 GRANT AVE	PHILADELPHIA	PHSL 1	U PENN
	RICE ALAN W	2271 COUNTRY CLUB DR	BRIDGEVILLE	CHEM 2	MIT
	ROSENBERG RONALD C	1834 E TULPEHOCKEN ST	PHILADELPHIA	ENGR 2	PRINCETON
	RYSZ WALTER R	717 W SIBLEY AVENUE	OLD FORGE	ENGR 2	MIT
	SCHICK MICHAEL	645 W SEDGWICK ST	PHILADELPHIA	CHEM 2	CORNELL U
	SHABAKER ROBERT H	OLD MIDDLETOWN RD	MEDIA	PHYS 1	HARVARD U
	SHAFFER OLIVIA C	SWARTHMORE COLLEGE	SWARTHMORE	ENGR 1	U WISC
	SHANAHAN PATRICIA A	2501 SO PARK ROAD	BETHEL PARK	PSYC 2	BRYN MAWR
	SILVERSTEIN MARTIN L	1268 LEVICK STREET	PHILADELPHIA 11	PSYC 2	STANFORD U
	SOMERSET JAMES H	120 HARRISON AVE	GLENSIDE	MATH 1	PRINCETON
	STIENING RAE F	82 HOODRIDGE DRIVE	PITTSBURGH 28	ENGR 1	U PENN
	STONER JOHN O	P O BOX 24	BERLIN	PHYS 3	MIT
	STOWELL JOHN C	906 POPLAR STREET	ERIE	PHYS 3	PRINCETON
				CHEM 2	MIT

P A	SUNA ANDRIS	80 FOURTH AVENUE	BROOMALL	PRINCETON	PHYS	2	PRINCETON
	THORINGTON RICHARD W	412 PENWYN ROAD	WYNNEWOOD	HARVARD U	BIOL	3	HARVARD U
	TRAHANOVSKY WALTER S	120 OAK STREET	CONEMAUGH	MIT	CHEM	2	MIT
	TRUEMAN THOMAS L	RIDLEY CREEK ROAD	MEDIA	U CHICAGO	PHYS	3	U CHICAGO
	VOGT WILLIAM G	1708 MYER AVENUE	MCKEESPORT	U PITT	ENGR	3	U PITT
	WEISS CHARLES JR	412 W MOUNT AIRY AVE	PHILADELPHIA	HARVARD U	BCHM	2	HARVARD U
	WILLIAMS JOHN E	114 SO 4TH AVENUE	CLARION	U ILLINOIS	BIOL	2	U ILLINOIS
	WILLIAMSON SAMUEL J	610 N WILBUR AVENUE	SAYRE	MIT	PHYS	1	U CAL BERK
	WILSON GUSTAVUS E JR	832 GLENVIEW STREET	PHILADELPHIA	MIT	CHEM	1	HARVARD U
	WOLL EDWIN J JR	2720 MT ROYAL RD	PITTSBURGH 17	CARN TECH	PHYS	3	CARN TECH
	WRIGHT ARTHUR W	49 FERGUSON AVENUE	BROOMALL	MIT	SOSC	2	MIT
	YOST PATRICIA A	R D 1 BOX 184	SUGARLOAF	PENN ST U	PSYC	2	PENN ST U
	ZARTMAN ROBERT E	RD 1	LITITZ	CAL TECH	EART	3	CAL TECH
P R	COLONROLDAN IVAN E	996 HUMACAO STREET	RIOPIEDRAS SR	PURTO RICO	MATH	1	U CHICAGO
R I	DURST RICHARD A	9 SYLVAN TERRACE	NEW PORT	MIT	CHEM	2	MIT
	FINE ARTHUR D	60 DABOLL STREET	PROVIDENCE 7	HARVARD U	ENGR	2	BROWN U
	GOULD MEREDITH C	63 FEDERAL ROAD	W BARRINGTON	MT HOLYOKE	ZOOL	1	ZOOL STA
	GOULD ROBERT O	18 EUCLID AVENUE	PROVIDENCE 6	U ST ANDRW	CHEM	3	U ST ANDRW
	LUND JUDITH N	2117 PAWTUCKET AVE	E PROVIDENCE	YALE U	BOTA	2	YALE U
	MARTINS JOSEPH F	23 HENRY ST	E PROVIDENCE	MIT	CHEM	1	HARVARD U
	SIMMONS WILLIAM S	20 SANTIAGO STREET	PROVIDENCE	HARVARD U	ANTH	2	HARVARD U
S C	CONNOR LAURENCE N JR	CONNOR ROAD	BARNWELL	NO CAR ST	ENGR	3	NO CAR ST
	GETTYS WILLIAM E	209 N MOUNTAIN ST	UNION	CLEMSON C	PHYS	2	U NOR CAR
	JOHNSON BEN L	95 HILLCREST AVE	CLEMSON	CLEMSON C	ENGR	2	U WISC
	LUNNEY DAVID C	2016 FOREST DRIVE	CAMDEN	U SO CAR	CHEM	1	U SO CAR
	MONTGOMERY LUCIUS K	220 HAMPTON AVE	KINGSTREE	CLEMSON C	MATH	1	BROWN U
	ROGERSON NANCY C	1417 IVY LANE	COLUMBIA	U SO CAR	PHYS	1	U WASH

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>PRESENT INST</u>	<u>FIELD</u>	<u>CHOSEN INST</u>
S D	BUSWELL LINDA M	1321 SOUTH THIRD	BROWN U	PSYC 2	BROWN U
	DRIML MARILYN J	529 BATTLE MT AVENUE	CORNELL C	ZOOL 1	WAKE FOR C
	RASMUSSEN GARY H	BOX 317	MIT	CHEM 3	MIT
	SCHUMAKER LARRY L		SO DAK S M	MATH 1	NEW YORK U
TENN	BLOOMER JAMES L	2239 WHITTLE SPG RD	U TENN	CHEM 2	U LONDON
	BURNS RALPH M	1509 RAMSAY ST	PURDUE U	ENGR 2	PURDUE U
	DIETRICH FRANK S	254 GARDENIA DRIVE	CAL TECH	PHYS 2	CAL TECH
	ENGELBERG DON P	1049 N MCLEAN BLVD	MIT	PHYS 1	PRINCETON
	GARDNER JANET K	689 ADAMS	U TENN	BCHM 2	U TENN
	HALL DONALD E	3604 BOWMAN CIRCLE	SO MISSION	PHYS 1	U COLORADO
	HAMM ROBERT N		U TENN	PHYS 2	U TENN
	LANIER RANDOLPH D	2027 BENJAMIN ST	NO WESTERN	CHEM 2	NO WESTERN
	PORTER JOHN C	R F D 2	U TENN	ENGR 1	MIT
	RANDOL BURTON S	150 N MCLEAN BLVD	PRINCETON	MATH 3	PRINCETON
TEX	RITTENBERG ALAN	2909 DUDLEY AVENUE	U CAL BERK	PHYS 2	U CAL BERK
	RIITTER ENLOE T	477 E MCKELLAR	SO WESTERN	PHYS 1	JOHNS HOPK
	THOMPSON JAMES R	942 N TREZEVANT	U ST ANDRW	MATH 1	PRINCETON
	VARNELL LARRY S		U SOUTH	PHYS 1	CAL TECH
	WALPOLE JAMES N	241 N GRAND AVENUE	DUKE U	ENGR 1	MIT
TEX	ANDERSON JOHN E	1601 NEWFIELD LANE	U DELAWARE	ENGR 2	U DELAWARE
	BARBIN ALLEN R	2530 TYLER	PURDUE U	ENGR 3	PURDUE U
	BARNES VIRGIL E II	207 EAST 33RD STREET	CAMBRIDGE U	PHYS 3	CAMBRIDGE U
	BOTT JERRY F	902 W RUSK	HARVARD U	ENGR 2	HARVARD U
	BRICE DAVID K	437 WOODLAWN AVENUE	U KANSAS	PHYS 2	U KANSAS
	BUFFLER RICHARD T	703 E 32ND ST	U TEXAS	EART 1	U WASH
	CHANDLER COLSTON	304 W STEADMAN	BROWN U	PHYS 1	PRINCETON
	CHESTER ARTHUR N	302 W 37TH STREET	U TEXAS	PHYS 1	INDIANA U
	CLARK BARRY G	2501 7TH AVENUE	CAL TECH	ASTR 2	CAL TECH
	COGDILL THOMAS J	617 N MAIN	HARVARD U	CHEM 2	HARVARD U
	COLLIER ROBERT J	2825 SIXTH AVENUE	HARVARD U	PHSL 2	HARVARD U

TEX	807 A EAST 14TH	AUSTIN 2	U TEXAS	MATH	2	U TEXAS
	DORROH JAMES R	JASPER	PRINCETON	ENGR	1	PRINCETON
	DOUGHARTY NEIL A	HOUSTON 35	RICE INST	PHYS	1	U CAL BERS
	DOYLE JOSEPH C	AUSTIN 5	U TEXAS	ZOOL	3	U TEXAS
	DREWRY GEORGE E	1001A W 22ND STREET	INCRNT WRD	BCHM	1	STANFORD U
	FINNEY PAULINE M	426 SO 26TH ST	RICE INST	PHYS	1	CAL TECH
	GIBSON BENJAMIN F	602 NO SECOND	HARVARD U	MATH	1	PRINCETON
	GILMARTIN MICHAEL C	5837 WALTHAM AVE	HARVARD U	MATH	1	PRINCETON
	GRABINER SANDY	310 WEST KELLY	POMONA C	PHYS	1	CAL TECH
	GREENHALL CHARLES A	3519 DICKASON	RICE INST	ASTR	1	CAL TECH
	GUNN JAMES E	205 W CARTER ST	TEXAS TECH	ENGR	2	U TEXAS
	HALE LEONARD A	ROUTE 1 BOX 242	TEX CHR U	MATH	1	HARVARD U
	HAMRICK GARY C	6038 VELASCO	WASH U STL	PHYS	3	WASH U STL
	JACKSON HENRY W	6755 GLEN ROCK	U CAL BERS	MATH	1	U CAL BERS
	JOHNSON CLAIBORNE H	6057 DE LOACHE AVE	U SOUTH	BPHY	1	HARVARD U
	JOHNSON ERNEST W JR	6136 MIMOSA LANE	RICE INST	ZOOL	1	YALE U
	JORDAN EMILY C	ROUTE 8 BOX 324 A	S HUSTN TC	BCHM	1	U TEXAS
	KAMINSKY MARJORIE E	ROUTE 1	ARIZONA	BIOL	1	U ARIZONA
	KNEZEK BERNARD D	ROUTE 2	TULANE U	PSYC	2	U WISC
	LEVY CHARLES M	4705 UNIV OAKS BLVD	ST LOUIS U	MATH	1	HARVARD U
	LOMONACO SAM J	7004 S RIDGE DRIVE	CORNELL U	CHEM	2	CORNELL U
	MCCLAINE WILLIAM M	1208 12TH ST	PRINCETON	ENGR	2	PRINCETON
	MCGUIRE MICHAEL L	1113 LANGFORD	JOHNS HOPK	EART	2	JOHNS HOPK
	MECKEL LAWRENCE D	2808 VIRGINIA STREET	LAMAR ST C	ENGR	1	RICE INST
	MEYERS CLYDE C JR	2858 AMARILLO	U TEXAS	ZOOL	3	U TEXAS
	MOORE ROBERT E	800 COLLEGE	HARVARD U	EART	2	HARVARD U
	MYERS RALPH L	1527 HANOVER	U TEXAS	ENGR	1	CAL TECH
	ODELL RALPH D	4408 DUAL	RICE INST	PHYS	1	CAL TECH
	PRESCOTT CHARLES Y	5080 FIELDWOOD DR	RICE INST	EART	1	RICE INST
	PUSEY WALTER C III	1744 BOLSOVER	U TEXAS	PHYS	1	CAL TECH
	REICHERT JOHN D	2803 BONNIE ROAD	FLA ST U	MATH	3	FLA ST U
	SANDERS BOBBY L	C/O L F SANDERS	U TEXAS	ENGR	1	U TEXAS
	THOMAS LEE C	5109 A OVERBROOK	U CAL BERS	CHEM	3	U CAL BERS
	WILLEY FREDERICK G	1426 NWOOD BLVD	U TEXAS	CHEM	3	U CAL BERS

STATE	NAME	ADDRESS	PRESENT INST	FIELD	CHOSEN INST
UTAH	BREWER JOHN M	JOHNS HOPKINS UNIV	JOHNS HOPK	BCHM 2	JOHNS HOPK
	DEWEY JOHN R	1334 SO 21ST EAST	U UTAH	ANTH 1	U HAWAII
	DORNY CARL N	90 NO FIFTH EAST	BRIG YNG U	ENGR 1	STANFORD U
	GERRIETS CARL E J	570 E 4TH N	UTAH ST U	MATH 2	ST U IOWA
	GRANT SHELDOON K		U UTAH	EART 1	U UTAH
	IVIE EVAN L	635 PATTERSON STREET	MIT	ENGR 2	MIT
	JENSON EVAN D	129 NO 2ND EAST	PENN ST U	CHEM 2	PENN ST U
	MOLER CLEVE B	3521 CRESTWOOD DRIVE	CAL TECH	MATH 1	STANFORD U
	MORTIMER ROBERT G	435 NO 4TH EAST	CAL TECH	CHEM 2	CAL TECH
	MUIRBROOK NEWELL K	606 CROSS STREET	U CAL BERK	ENGR 3	U CAL BERK
	PRICE JOHN A	418 BETA 12	U UTAH	ANTH 2	U UTAH
	RUNNELLS DONALD D	2119 LINCOLN STREET	HARVARD U	EART 3	HARVARD U
	TAYLOR VASCO R	4412 SO 1500 EAST	U UTAH	MTRL 1	U UTAH
	TOLMAN CHADWICK A	453 NORTH 4TH EAST	U CAL BERK	CHEM 2	U CAL BERK
VA	ADAMS JOHN B	P O BOX 144	U CAL BERK	PHYS 3	U CAL BERK
	ADELBERGER ERIC G	1317 N WAYNE STREET	CAL TECH	PHYS 2	CAL TECH
	ANDERSON JAMES T	1628 MT EAGLE PLACE	DAVIDSON C	MATH 1	MIT
	BAKER THOMAS N III	VIRGINIA ST COLLEGE	CORNELL U	CHEM 3	CORNELL U
	BARKER ROBERT G	1651 BRANDYWINE DR	PRINCETON	MATH 3	PRINCETON
	BOWEN ELEANOR W	1751 SHERWOOD ROAD	RAND MACON	ZOOL 1	INDIANA U
	BOYKIN JOHN C	3627 STRATFORD RD	DUKE U	ZOOL 1	U WASH
	COOK GERALD	RT 1 BOX 104	V P I	ENGR 1	MIT
	GARMON LUCILLE B	7302 SOMOA DRIVE	U RICHMOND	CHEM 2	MIT
	HENDERSON NANINE S	1038 HANOVER AVE	PEMBROKE C	ZOOL 1	U CAL BERK
	HUFFMAN ARTHUR H	107 SKYVIEW	V P I	PHYS 1	MIT
	KENK VIDA C	810 RAMSEY STREET	C WM MARY	Biol 1	RADCLIFFE
	LOUTZENHEISER CARL B	4500 SO 8TH STREET	STANFORD U	ENGR 2	STANFORD U
	LUNDQUIST DAVID E	3606 SPOTTSMOOD PL	U VIRGINIA	PHYS 1	PRINCETON
	MANGUM CHARLOTTE P	615 BALDWIN PL	YALE U	ZOOL 2	YALE U
	MCCLANAHAN CHARLENE	RT 1 BOX 118	OHIO ST U	GENE 2	OHIO ST U
	MINTZ MICHAEL J	5450 N 20TH STREET	JOHNS HOPK	CHEM 1	COLUMBIA U
	MONTGOMERY CHARLES G		CAL TECH	PHYS 2	CAL TECH
	MOSS CALVIN E	3418 REYNOLDS ROAD	U VIRGINIA	PHYS 1	CAL TECH
CHARLOTTESVILLE	CHARLOTTESVILLE	CHARLOTTESVILLE	U CAL BERK	PHYS 3	U CAL BERK
	ARLINGTON 1	ARLINGTON 1	CAL TECH	PHYS 2	CAL TECH
	ALEXANDRIA	ALEXANDRIA	DAVIDSON C	MATH 1	MIT
	PETERSBURG	PETERSBURG	CORNELL U	CHEM 3	CORNELL U
	CHARLOTTESVILLE	CHARLOTTESVILLE	PRINCETON	MATH 3	PRINCETON
	PETERSBURG	PETERSBURG	RAND MACON	ZOOL 1	INDIANA U
	RICHMOND 25	RICHMOND 25	DUKE U	ZOOL 1	U WASH
	GALAX	GALAX	V P I	ENGR 1	MIT
	RICHMOND 29	RICHMOND 29	U RICHMOND	CHEM 2	MIT
	NORFOLK 8	NORFOLK 8	PEMBROKE C	ZOOL 1	U CAL BERK
	BLACKSBURG	BLACKSBURG	V P I	PHYS 1	MIT
	ALEXANDRIA	ALEXANDRIA	C WM MARY	Biol 1	RADCLIFFE
NORFOLK	ARLINGTON 4	ARLINGTON 4	STANFORD U	ENGR 2	STANFORD U
	HAMPTON	HAMPTON	U VIRGINIA	PHYS 1	PRINCETON
	NORFOLK 7	NORFOLK 7	YALE U	ZOOL 2	YALE U
	GRUNDY	GRUNDY	OHIO ST U	GENE 2	OHIO ST U
	ARLINGTON 5	ARLINGTON 5	JOHNS HOPK	CHEM 1	COLUMBIA U
	HOLLINS COLLEGE	HOLLINS COLLEGE	CAL TECH	PHYS 2	CAL TECH
	RICHMOND 23	RICHMOND 23	U VIRGINIA	PHYS 1	CAL TECH
P O BOX 144	P O BOX 144	P O BOX 144	U CAL BERK	PHYS 3	U CAL BERK
	1317 N WAYNE STREET	1317 N WAYNE STREET	CAL TECH	PHYS 2	CAL TECH
	1628 MT EAGLE PLACE	1628 MT EAGLE PLACE	DAVIDSON C	MATH 1	MIT
	VIRGINIA ST COLLEGE	VIRGINIA ST COLLEGE	CORNELL U	CHEM 3	CORNELL U
	1651 BRANDYWINE DR	1651 BRANDYWINE DR	PRINCETON	MATH 3	PRINCETON
	1751 SHERWOOD ROAD	1751 SHERWOOD ROAD	RAND MACON	ZOOL 1	INDIANA U
	3627 STRATFORD RD	3627 STRATFORD RD	DUKE U	ZOOL 1	U WASH
	RT 1 BOX 104	RT 1 BOX 104	V P I	ENGR 1	MIT
	7302 SOMOA DRIVE	7302 SOMOA DRIVE	U RICHMOND	CHEM 2	MIT
	1038 HANOVER AVE	1038 HANOVER AVE	PEMBROKE C	ZOOL 1	U CAL BERK
	107 SKYVIEW	107 SKYVIEW	V P I	PHYS 1	MIT
	810 RAMSEY STREET	810 RAMSEY STREET	C WM MARY	Biol 1	RADCLIFFE
NORFOLK	4500 SO 8TH STREET	4500 SO 8TH STREET	STANFORD U	ENGR 2	STANFORD U
	3606 SPOTTSMOOD PL	3606 SPOTTSMOOD PL	U VIRGINIA	PHYS 1	PRINCETON
	615 BALDWIN PL	615 BALDWIN PL	YALE U	ZOOL 2	YALE U
	RT 1 BOX 118	RT 1 BOX 118	OHIO ST U	GENE 2	OHIO ST U
	5450 N 20TH STREET	5450 N 20TH STREET	JOHNS HOPK	CHEM 1	COLUMBIA U
			CAL TECH	PHYS 2	CAL TECH
	3418 REYNOLDS ROAD	3418 REYNOLDS ROAD	U VIRGINIA	PHYS 1	CAL TECH

VA	MURRAY JOSEPH J JR RENNINGER GEORGE H RICHARDSON SARA L SMITH ROBERT S SPITZER DANIEL M JR STANDRIDGE ROBERT T STEARNS EVELYN N STEPHENS FRANKLIN M YOUNG JOHN A	6 JORDAN STREET 121 HARRISON ROAD 401 ROANOKE STREET M530 ARLINGTON TOWERS 722 PARK STREET 112 MONTEBEUO CIRCLE 1424 SO 28TH STREET 4533 N 32ND ST 6041 28 STREET N	LEXINGTON FREDERICKSBURG BLACKSBURG ARLINGTON 9 CHARLOTTESVILLE CHARLOTTESVILLE ARLINGTON 7 ARLINGTON 7 ARLINGTON	OXFORD U PRINCETON U CHICAGO R P I U VIRGINIA U VIRGINIA C WM MARY DARTMOUTH MIAMI U	ZOOL 3 PHYS 2 PHSL 2 ENGR 1 PHYS 3 CHEM 3 CHEM 3 EART 1 MTRL 1	OXFORD U PRINCETON KAROLINSKA MIT U VIRGINIA U VIRGINIA U CAL BERK HARVARD U MIT
VT	ADLER STEPHEN L COLE STEPHEN A SARGENT GEORGE D	R F D NORTH TOWN OF STRATTON P O 29 FRENCH ST	BENNINGTON JAMAICA BARRE	HARVARD U CORNELL U HARVARD U	PHYS 1 SOSC 1 CHEM 2	PRINCETON CORNELL U HARVARD U
WASH	ALVORD RICHARD P ARMSTRONG RICHARD L BEATTY DAVID D CRASWELL KEITH J ESPER HILDEGARD FARIS WILLIAM G GERBRACHT ROBERT J HARTILL DONALD L HEIPLE CLINTON R HODGE ROBERT W HOPCROFT JOHN E INGRAHAM JOHN C JENKINS DAVID A JONAS ROBERT J KARLINSEY KURTLEE J KLEIN GERALD W KROON JOHN D KRUEGER ROGER C	804 G STREET 1911 W 73 R R 2 RT 4 BOX 51A P O BOX 118 4318 EAST 41 STREET 7907 SO 112TH STREET ROUTE 2 BOX 87 7334 51 ST N E P O BOX 441 827 33RD AVENUE 100 MEMORIAL DRIVE 1017 BOYLSTON AVE NO 1601 CHARLOTTE 5410 SO ASOTIN 8 WEST ETRURIA STREET 3851 38TH AVE SO 17518 12TH AVE N E	CENTRALIA SEATTLE 7 BLAINE PORT ORCHARD INDEX SEATTLE 5 SEATTLE 88 CHEWELAH SEATTLE 15 PORT ANGELES SEATTLE 22 CAMBRIDGE 42 SEATTLE 2 PULLMAN TACOMA 8 SEATTLE 99 SEATTLE 8 SEATTLE 55	YALE U YALE U U OREGON U WASH COLUMBIA U PRINCETON CAL TECH MIT STANFORD U U CHICAGO SEATTLE U MIT U CAL BERK U IDAHO U ILLINOIS U WASH U CAL BERK CARN TECH	EART 2 EART 2 PHSL 2 MATH 2 ZOO 3 MATH 2 PHYS 2 PHYS 1 ENGR 1 SOSC 2 ENGR 1 PHYS 3 ENGR 2 BIOL 2 ENGR 2 CHEM 2 MATH 2 ENGR 1	YALE U YALE U U OREGON U WASH COLUMBIA U PRINCETON CAL TECH CAL TECH U SHEFFLD U CHICAGO U WASH MIT U CAL BERK MONT ST C U UTAH U WASH U CAL BERK U MICHIGAN

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>PRESENT INST</u>	<u>FIELD</u>	<u>CHOSEN INST</u>
WASH	LAWLER RONALD G	1631 N 54TH STREET	U CAL BERK	CHEM 2	U CAL BERK
	MCKEILL DALE A	4651 NO VISSCHER	HARVARD U	PHYS 3	HARVARD U
	RITER JOHN R JR	3972 UNION BAY CIRCLE	U WASH	CHEM 2	U WASH
	RUSTAD NORMAN E	P O BOX 513	U COLORADO	CHEM 2	U COLORADO
	SANDBERG HOWARD E	11204 EAST 20TH AVE	BRIG YNG U	BPHY 1	YALE U
	STAVE LLOYD P	7545 MARY AVE N W	U WASH	ENGR 1	MIT
	SWANSON DONALD A	720 W CHESTNUT	JOHNS HOPK	EART 2	JOHNS HOPK
	VERNER JARED	10001 WILLOW ST	U WASH	ZOOL 2	U WASH
	WIBERG CURT A	503 SO ANDERSON	U WASH	BIOL 2	ST C WASH
W VA	BILLHEIMER JOHN W	205 W 32ND ST	U DETROIT	ENGR 1	MIT
	CALDWELL RICHARD A	183 EDISON DRIVE	MIT	CHEM 1	U CAL BERK
	CLEVELAND JAMES D	932 OAKHURST DR	W VA SC	CHEM 1	PURDUE U
	DAVIDSON CHARLES N	500 N 3RD AVENUE	FLA ST U	CHEM 3	FLA ST U
	FRIEDLY JOHN C JR	9 CHEROKEE DRIVE	U CAL BERK	ENGR 2	U CAL BERK
	HARRIS CONSTANCE M	1232 RIDGE DRIVE	DUKE U	BCHM 1	DUKE U
	HIRST LESTER L JR	441 DEVON ROAD	U MARYLAND	PHYS 2	U MARYLAND
	HOLT ROBERT B	1521 BRIDGE RD	MIT	CHEM 1	U C L A
	MANN JAMES E JR	530 PARKWAY	HARVARD U	ENGR 2	HARVARD U
	WEIMER ROBERT F	68 BRENTWOOD AVENUE	MIT	ENGR 1	U CAL BERK
WYO	CALVERT JAMES B	216 W 7TH STREET	U COLORADO	PHYS 3	U COLORADO
	FRONAPFEL RICHARD W	BOX 415	U WYOMING	MATH 1	PRINCETON
WISC	ASPINES DAVID E	R 1 BOX 82	U WISC	PHYS 2	U CAL JOLL
	BEALL HERBERT A	821 N ONEIDA STREET	U WISC	CHEM 1	HARVARD U
	BEITZEL JOHN E	6109 W LLOYD STREET	MICH C MIN	EART 1	U WISC
	BERMAN NEIL S	4701 N SHERMAN BLVD	U TEXAS	ENGR 3	U TEXAS
	BIRDSALL WILLIAM C	3109 N LAKE DRIVE	JOHNS HOPK	SOSC 2	JOHNS HOPK
	BRANT DAVID A	507 F EAGLE HGTS APTS	U WISC	CHEM 3	U WISC

WISC	320 CURTIS ST RT 1	LAKE GENEVA	U WISC	CHEM	1	ILLINOIS
BUTTON ALLAN C	3025 N 36TH STREET	READSTOWN	U MINN	SOSC	3	U MINN
CROWLEY JOHN M	128 HARDING STREET	MILWAUKEE 10	U WISC	CHEM	1	U WISC
DOEDENS ROBERT J	107 G EAGLE HEIGHTS	WATERTOWN	U WISC	ENGR	1	MIT
EBERT PAUL M	R 2	MADISON 5	U WISC	BPHY	2	MIT
EIKENBERRY ERIC F	ROUTE 1 BOX 302	STURGEON BAY	U WISC	MCBI	2	U WISC
FREA JAMES I	411 N CLARK STREET	WAUPUN	U WISC	BOTA	1	U WISC
FRERIKS JUDITH M	2232 N 7TH ST	APPLETON	HARVARD U	CHEM	3	HARVARD U
HARRIMAN JOHN E	2528 RIVERVIEW DR	SHEBOYGAN	CARN TECH	ENGR	1	CARN TECH
HEIDER O FREDERICK	3727 N 19 ST	JANESVILLE	U WISC	ENGR	1	MIT
HENKE WILLIAM L	110 VIRGINIA TERR	MILWAUKEE 6	U WISC	MATH	1	U MICHIGAN
HINTZMAN WILLIAM R	225 CARLIN COURT	MADISON 5	HARVARD U	MATH	2	HARVARD U
INGRAHAM EDWARD C	817 E FAIRY CHASM RD	HARTLAND	HARVARD U	MATH	3	HARVARD U
JACOBS STANLEY J	P O BOX 146	MILWAUKEE 17	U WISC	PSYC	1	STANFORD U
KAUFMAN RONALD	2119 A W PIERCE	MUSKEGO	YALE U	CHEM	2	YALE U
KESTNER NEIL R	R R 2	MILWAUKEE 4	MARQUETTE	BOTA	2	U WISC
KRESS LAWRENCE F	602 K EAGLE HGTS	CLINTONVILLE	U WISC	CHEM	2	U WISC
KRUBSACK ARNOLD J	3359 E WASHINGTON AVE	MADISON 5	U WISC	ZOOL	2	U WISC
LEITH JOHN D JR	1111 WILLOW LANE	MADISON 4	U WISC	CHEM	2	U WISC
LEVY JEROME F	205 N ORCHARD ST	MADISON 5	CAL TECH	PHYS	2	CAL TECH
LINK JOHN K	3109 N LAKE DRIVE	MADISON	U WISC	EART	2	U WISC
MACURDA DONALD B JR	2016 N 85 STREET	MILWAUKEE 11	JOHNS HOPK	BLOL	3	JOHNS HOPK
MAHOWALD ANTHONY P	2931 N BARTLETT AVE	WAUWATOSA 13	BROWN U	PSYC	3	BROWN U
MAKOUS WALTER L	1267 PRAIRIE AVE	MILWAUKEE 11	U WISC	ZOOL	1	U WISC
MEYER RALPH R	312 MORRIS COURT	BELOIT	STANFORD U	ENGR	2	STANFORD U
OETZEL GEORGE N	OAK LAKE DRIVE	MADISON	U CHICAGO	ASTR	2	U CHICAGO
OSTRIKER JEREMIAH P	28 LATHROP STREET	BELOIT	U NOTRE D	ENGR	1	U WISC
RAMSDEN CHARLES J	505 G EAGLE HGTS	MADISON 5	U WISC	PHYS	1	CAL TECH
RUTHERFORD REGINALD	226 N L STREET	MADISON 5	U WISC	CHEM	3	U WISC
SMITH DOUGLAS L	1224 UNIV BAY DR	SPARTA	U WISC	CHEM	3	U WISC
SUTTON PAUL W	422 N HENRY STREET	MADISON 5	HARVARD U	CHEM	3	HARVARD U
TREICHEL PAUL M JR	5214 HAMMERSLEY RD	MADISON 3	U WISC	CHEM	2	U WISC
WAGNER EUGENE R		MADISON 5	U WISC	ENGR	1	U WISC
WYNGAARD JOHN C						

NATIONAL SCIENCE FOUNDATION

GRADUATE FELLOWSHIP PROGRAM FOR FISCAL YEAR 1961

APPLICANTS ACCORDED HONORABLE MENTION, BY STATE OF PERMANENT RESIDENCE,
WITH HOME ADDRESS, INSTITUTION LAST ATTENDED AND FIELD OF STUDY INDICATED

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>INST</u>	<u>FIELD</u>
ALA	BROBECK CHARLES M	JESUIT HOUSE STUDIES	MOBILE 22	SPRNG HILL
	CAMPBELL MARTHA D	RT 1 BOX 293	ROBERTSDALE	ALABAMA C
	CANNON PATRICIA L	P O BOX 54	MT VERNON	URSULINE C
	CHRISTENSEN MARY H	753 ST FRANCIS STREET	MOBILE 16	SPRNG HILL
	FLETCHER CHARLES R	1155 IREDELL CIRCLE	BIRMINGHAM 9	RICE INST
	GIBBONS J WHITFIELD	426 33RD AVENUE	TUSCALOOSA	U ALABAMA
	GILL JACKIE L	1125 14TH AVENUE	BIRMINGHAM 5	BRMGHAM SO
	GLENN VIRGINIA S	56 AZAN ST	PRICHARD	MISS SO C
	HOOPER JAMES W	702 E TUSCALOOSA ST	FLORENCE	ALA POLY I
	MEADORS JOHN G	ROUTE 1	LANETT	ALA POLY I
	PATE JAMES L	BOX 4211	UNIVERSITY	U ALABAMA
	POZSGAY LAWRENCE J	JESUIT HOUSE OF STUDY	MOBILE	SPRNG HILL
	SCOTT JOHN W JR	701 OAK STREET	MONTEVALLO	ALABAMA C
	SMITH WILLIAM P	536 PARK AVENUE	BIRMINGHAM 9	U NOR CAR
	SOMMERFELDT EDWARD E	JESUIT HOUSE STUDIES	MOBILE 22	SPRNG HILL
	STANSELL KITTY L	ROUTE ONE	MONTEVALLO	ALABAMA C
	VANBUREN ARNIE L	RT 13 BOX 1222	BIRMINGHAM	BRMGHAM SO
	VAUGHN VERGIL V	3352 CRESENT DRIVE	HUEYTOWN	ALA POLY I
	WHITE DAVID F	3659 LOYOLA LANE	MOBILE	SPRNG HILL
ALAS	SANDVIK PETER O	11 SANDVIK STREET	FAIRBANKS	STANFORD U
				EART 2

ARK	FREEMAN THOMAS J JR HULTSMAN ST CLAIR L MILTON JOHN W PARMLEY MARION W SHOEMAKE LYMAN B SIMMEN LOUIS E	21 SHERRILL HGTS 1807 SHADOWLANE 914 NO 34TH ST 4110 N 54TH STREET 903 W SEMMES 321 SPRUCE	LITTLE ROCK LITTLE ROCK FORT SMITH FORT SMITH OSCEOLA LITTLE ROCK	U TEXAS TULANE U HARDING ARK POLY C U ARKANSAS U COLORADO	EART 3 PHYS 2 MATH 1 PHYS 1 PHYS 1 AGRI 1 EART 3
ARIZ	ARCHER STEVEN M DEVORE ROBERT H HASKELL CHARLES T HATFIELD WILLIAM E LEO RICHARD A MAGID ROBERT N MAURER DONALD W ROTH RICHARD L SPOSITO GARRISON WEISZ GIDEON WILLIS BYRON H	3048 W PIERSON 2944 N MOUNTAIN 5601 E COPPER STREET 615 E DRACHMAN STREET 4577 CALLE TUBERIA 3320 N 6TH AVENUE 2719 N 21 ST ROUTE 6 BOX 269 RT 2 BOX 75 971 CHRYSLER DRIVE 920 WILLIAMSON AVENUE	PHOENIX 17 TUCSON TUCSON TUCSON PHOENIX PHOENIX PHOENIX TUCSON CHANDLER TUCSON 12 WINSLOW	ARIZ ST C U ARIZONA U ARIZONA U ARIZONA ARIZ ST C ARIZ ST C ARIZ ST C U CAL BERT U ARIZONA U CHICAGO MIT	PHYS 1 MATH 2 MATH 2 CHEM 3 CHEM 3 PHYS 1 SOSC 2 MATH 1 MATH 3 AGRI 1 PHYS 2 ENGR 1
CAL	ALBERT DAVID J ANDERSON FREDRICK J ANDERSON JAMES H JR ASHENFELTER ROBERT C BAILEY ROBERT F BAIRD JEANNE A BAIRD LEEMON C JR BAUMERT LEONARD D BENNION DOUGLAS N BEZZERIDES BANDEL BILLET STEPHEN L BLACK WILLIAM C JR BLATT HARVEY	1221 2ND STREET BOX 253 665 CHANNING AVENUE 17144 BULLOCK 6256 EAST LAKE DR 1117 SINGINGWOOD RD 1117 SINGINGWOOD 4926 CROWN AVENUE 1311 66TH AVENUE 1409 E CHANNEL 1230 MONTEREY BLVD 5771 MADRA AVENUE 4990 1/2 MARIONWOOD	MONTEREY VICTOR VILLE PALO ALTO ST ENCINO SAN DIEGO 19 SACRAMENTO 25 SACRAMENTO 25 LA CANADA OAKLAND 21 STOCKTON 5 SAN FRANCISCO SAN DIEGO 20 CULVER CITY	U KANSAS CLARK U STANFORD U HARVEYMUDD SAN DIEGO PARK C MO PARK C MO U SO CALIF U CAL BERT U CAL BERT SANFRAN ST POMONA C U C L A	PSYC 1 CHEM 2 ENGR 2 PHYS 1 PHYS 2 MATH 1 PHYS 1 MATH 2 ENGR 2 PHYS 1 ZOO 1 PHYS 1 EART 3

STATE	NAME	ADDRESS	INST	FIELD
CAL	BOWMAN THOMAS E	1605 LASSEN WAY	CAL TECH	ENGR 2
	BROWN KATHRYN K	313 6 STANFORD VILL	STANFORD	BOTA 1
	BROWN LARRY C	1395 MORENA BLVD	SAN DIEGO	CHEM 1
	BURCH STEPHEN H	BOX 6	STANFORD	EART 2
	BUSHEE JONATHAN M	659 EAST HILL AVE	SAN DIEGO	EART 1
	CALAPRICE JOHN R	2212 ISABELLA AVE	U CAL BARB	BIOL 2
	CALDWELL JOHN T	1498 KITTOE DRIVE	SANJOSE ST	PHYS 2
	CAPERON JOHN	ROUTE 1 BOX 43H	U CAL JOLL	BIOL 2
	CHURCH ROBERT W	26 ALVARADO AVE	COLO WSTRN	ZOOL 1
	CLIFFORD WARREN E	527 VIDAL DRIVE	U CAL BERK	CHEM 2
	COATNEY RICHARD L	1197 GLENN AVE	SANJOSE ST	CHEM 1
	COHEN RICHARD L	6111/2 N OAKLAND	CAL TECH	PHYS 3
	CONCANNON KATHLEEN P	2964 AULIN DRIVE	SANJOSE ST	BCHM 1
	CONNES CAROLE L	1012 MARIPOSA AVENUE	C HOLY NME	BOTA 1
	COWNIE JOHN B	725 MARGUERITA AVE	LOYOLA CAL	PHYS 1
	CREVELING LOUIS JR	44 A ESCONDIDO VILL	STANFORD	PHYS 2
	CUTLER BETSEY D	2128 GREAT HIGHWAY	SANFRAN ST	ZOOL 1
	DALTON EDWARD K	829 GRAPE STREET	STANFORD U	PHYS 1
	DANIELS ANNE E	715 46TH AVE	STANFRAN C	MISC 1
	DAVIDSON ROBERT C	127 HARVEY DRIVE	LASIERRA C	PHYS 1
	DAVIES DAVID H	6206 FALMOUTH DR	SAN DIEGO	MATH 1
	DAVIS BRIANT L	5010 MARIONWOOD DR	U C L A	EART 3
	DAVIS HENRY W	146 N WILLAMAN DRIVE	U COLORADO	MATH 2
	DAVIS LAWRENCE S	2508 RIDGE RD	U CAL BERK	AGRI 2
	DEPILLIS JOHN	2911 DEAKIN STREET	U CAL BERK	MATH 2
	DEWOLF MARY Y	1637 SAN GABRIEL BLVD	RADCLIFFE	CHEM 2
	DICKEY JAMES M III	414 N CITRON ST	REDLANDS U	MATH 1
	DIEBERT CURTIS E	5633 N MAROA	FRESNO ST	CHEM 1
	EIDSWICK JOHN A	120 E SPARTAN CITY	SANJOSE ST	MATH 1
	ELCONIN THEODORE H	410 BROCKMONT DR	CAL TECH	MATH 1
	EMANUEL GEORGE J	28E ESCONDIDO VILL	STANFORD	ENGR 3
	ESCATELL JOSEPH F	4269 WALTON AVENUE	U SO CALIF	PHYS 1
	ECHSTRUTH PAUL T	243 SO 18TH STREET	STANFORD U	PHYS 1
	FICKES GARRY N	5663 GASKILL ST	U WISC	CHEM 2
	FOSTER RICHARD A	54 CUMBRE LANE	CAL TECH	MATH 1
	FOWLER SANDRA L	1895 9TH	U CAL RIVR	PHSL 1
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CAL	FRITSCH ALBERT E	1635 1/2 W 108TH ST	LOS ANGELES 47	U C L A	EART	3
	GANST FREDERICK C	500 LANDFAIR AVE	LOS ANGELES	U C L A	ANTH	1
	GOLDMAN ALLEN M	443 VENTURA AVENUE	PALO ALTO	STANFORD U	PHYS	3
	GOULD RICHARD A	4242 CRESTA AVE	SANTA BARBARA	HARVARD U	ANTH	1
	GRAHAM DONALD W	BOX 234 REED COLLEGE	PORTLAND 2	REED C	CHEM	1
	GRIFFIN JAMES R	142 LINDEN RD	WATSONVILLE	U CAL BERK	BOTA	3
	GURLEY LAWRENCE T	2564 BARRINGTON AVE	LOS ANGELES 64	CAL TECH	MATH	2
	GUY GEORGE A	103 ROMONA RD	MENLO PARK	STANFORD U	BIOL	1
	HAAKE MARGOT A	2360 QUEENSBERRY ROAD	PASADENA 7	U C L A	BCHM	1
	HANSON JEAN E	1103 STANYAN STREET	SAN FRANCISCO	SANFRAN ST	BIOL	1
	HARDY JAMES P	2542 ENCINAL AVENUE	MONTROSE	OCCIDENTAL	CHEM	1
	HARRIS STEPHEN E	3037 ALMA ST	PALO ALTO	STANFORD U	ENGR	2
	HARWELL KENNETH E	APT 9 261 S HUDSON	PASADENA	CAL TECH	ENGR	2
	HEFFELFINGER NANCY J	2605 ELLSWORTH ST	BERKELEY 4	U CAL BERK	SOSC	2
	HERBERT RALPH D	441 SILVERBROOK DR	EL CAJON	SAN DIEGO	PSYC	1
	HESLIN RICHARD E	2910 HILLEGASS AVE	BERKELEY 5	U CAL BERK	PSYC	1
	HICKEL RUTH A	828 SO STATE	HEMET	REDLANDS U	BCHM	1
	HILL REBECCA	68 CENTRAL AVE	SAUSALITO	PENN ST TC	GENE	1
	HITCHCOCK JAMES C JR	4495 B WOODWARD AVE	FRESNO 2	FRESNO ST	ZOOL	2
	HOLLISTER LINCOLN S	216 SO WESTGATE AVE	LOS ANGELES 49	HARVARD U	EART	1
	HOOPER CAROLE F	53 B ESCONDIDO VILL	STANFORD	STANFORD U	MATH	1
	HUGHES ROBERT B	11748 PEACH TREE	YUGALPA	U CAL RIVR	MATH	1
	HUNEKE JOHN C	105 E TERRACE DR	HANFORD	REDLANDS U	PHYS	1
	JENSEN DONALD E	129 CARY DR	AUBURN	CAL TECH	PHYS	1
	KACHEN GEORGE I JR	3332 JORDAN ROAD	OAKLAND 2	U CAL BERK	ENGR	1
	KENDIG ALBERT P	6844 BECKETT ST	TUJUNGA	STANFORD U	CHEM	1
	KEPPE PAUL C	1708 SWEETWOOD	COLMA	U OKLAHOMA	PHYS	2
	KEYES DAVID F	61 B ELLIS	CHINA LAKE	U C L A	MATH	1
	KEYS NOEL W	828 ARLINGTON AVE	BERKELEY 7	U NOR CAR	PSYC	3
	KINCADE VALERIE C	1930 WALNUT	BERKELEY 4	U CAL BERK	SOSC	2
	KING BARBARA J	1209 FITCHWAY	SACRAMENTO 25	U CAL DAV	CHEM	1
	KING MARJORIE A	42 WOODLAND 2	SAN FRANCISCO	SANFRAN ST	MCBI	2
	KLINGER ALLEN	11722 NEBRASKA AVE	LOS ANGELES 25	U C L A	ENGR	2
	KREPS SUSAN E	2335 WAVERLEY	PALO ALTO	SWARTHMORE	BOTA	1
	LAMPMAN GARY M	7118 RITA AVENUE	HUNTINGTON PK	U WASH	CHEM	2
	LANGFORD ADRIENNE L	618 GROVE STREET	S LUIS OBISPO	CAL ST POL	ZOOL	1
	*KLIOFF LIONEL G	1017 HARVARD ST	SANTA MONICA	DUKE U	BIOL	2

*Out of alphabetical order

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>INST</u>	<u>FIELD</u>
CAL	LEEPER EDWARD A	2760 AGATE ST	U CAL BERK	MATH 2
	LERSTEN NELS R	849 RILEY DR	U CAL BERK	BOTA 2
	LILLIE JOHN M	2539 COLLEGE AVENUE	ENGR	ENGR 1
	LINDQUIST NORMAN F	288 VAN BUREN	LINFIELD C	MATH 1
	LONG NANCY D	1922 LAW ST	POMONA C	ZOOL 1
	LOWNDES DOUGLAS H JR	1669 LA CRESTA DRIVE	STANFORD U	PHYS 1
	LUCCHESI JOHN C	1817 OXFORD	U CAL BERK	GENE 3
	LUDDEN JAMES R	135 ROGERS AVENUE	POMONA C	CHEM 1
	MARSH MICHAEL P	1720 DELAWARE ST	U CAL BERK	BIOL 3
	MARTIN MARLO R	5765 9TH AVENUE	U C L A	PHYS 1
	MATISON ESTHER R	12906 BRENTWOOD TERR	REDLANDS U	ZOOL 1
	MCCLANAHAN LONNIE L	3576 VERDE ST	HARVEYMUDD	CHEM 1
	MCKINNEY PETER M	1525 RAMONA AVENUE	U CAL RIVR	MATH 1
	MCLEOD DONALD E	4640 JARVIS STREET	U CAL BERK	MCBI 2
	MELLIEN RICHARD C	2715 A HILLEGASS I	U CAL BERK	PHYS 1
	MILLS DOUGLAS L	1451 LINCOLN STREET	LOYOLA CAL	MATH 1
	MONTAGUE PHILLIP T	5553 AUCKLAND AVE	U CAL BERK	PHYS 1
	MONTROS HOMER E	831 RILEY DRIVE	U CAL BERK	PHYS 1
	MORTON MARTIN L	274 MAGNOLIA AVE	SANJOSE ST	ZOOL 2
	MOTTA JEROME J	5960 KEITH AVE	SANFRAN ST	BIOL 1
	MUSHAN STEVEN A	3761 BARRINGTON AVE	U C L A	ASTR 2
	NEWHALL NICHOLAS S	78 WALNUT AVE	STANFORD U	ASTR 1
	NIELSEN RICHARD L	3939 SCANDIA WAY	U CAL BERK	EART 3
	NIES RICHARD C	1620 INA DRIVE	U C L A	PSYC 2
	NIMITZ MARY A SIS	DOMINICAN CONVENT	STANFORD U	PHSL 2
	OGAN EUGENE	P O BOX 91	HARVARD U	ANTH 2
	PARKINSON MICHAEL T	2707 42ND AVENUE	U CHICAGO	PHYS 2
	PIANKA ERIC R	837 FOURTH ST	U WASH	ZOOL 1
	POPE BARBARA M	520 COWPER STREET	STANFORD U	PHSL 2
	PRATHER JAMES G	434 JUNCTION AVE	U OKLAHOMA	PHYS 1
	PRICE LEROY R	1127 H TENTH ST	U CAL BERK	PHYS 2
	PRIOR MICHAEL H	921 ORMA DR	POMONA C	PHYS 1
	RAYMOND CHARLES F	15611 BITTNER ROAD	U CAL BERK	PHYS 1
	REIN ALAN R	721 ALTO VISTA RD	REED C	BIOL 1
	REYNOLDS RICHARD A	1731 CLEVELAND	U SHEFFLD	ENGR 2
	RIPKA WILLIAM C	4455 STANBRIDGE AVE	CAL TECH	CHEM 1

CAL	RITSCHARD RONALD L	424 E LEMON	GLENDORA	CAL ST POL	ZOOL	1
	ROBBINS RALPH R JR	1846 SPRUCE APT 34	BERKELEY 9	U CAL BERK	ASTR	1
	ROCKWELL CHARLES S	253 RHEEM BLVD	MORAGA	U CAL BERK	SOSC	3
	ROSENBLUM EDWIN E	2144 SACRAMENTO ST	BERKELEY 2	U CAL BERK	ZOOL	2
	SACKMAN GEORGE L	691 SALVATIERRA ST	STANFORD	STANFORD U	ENGR	3
	SAWYER JOHN O JR	1492 1/2 EAST 8TH ST	CHICO	CHICO ST C	BIOL	1
	SCHIBE KARL E	2134 WARD	BERKELEY 2	U CAL BERK	PSYC	2
	SCHULZ MANFRED B	2136A CURTIS STREET	BERKELEY 2	U CAL BERK	PHYS	2
	SCHWAB MICHAEL	1128 SO SYCAMORE AVE	LOS ANGELES 19	CAL TECH	PHYS	1
	SCHWEITZER STUART O	1926 OVERLAND AVE	LOS ANGELES 25	U C L A	SOSC	1
	SIEBERT JEROME F	193 COMMERCIAL	WILLITS	U CAL BERK	PHYS	1
	SIMON GEORGE W	69 NO MERIDITH AVE	PASADENA	CAL TECH	PHYS	2
	SMITH RICHARD L	4129 ALLOTT AVE	SHERMAN OAKS	U CAL DAV	BOTA	1
	SNOW DAVID T	2930 E 3RD ST	LONG BEACH	U CAL BERK	ENGR	3
	SNOW DONALD R	4285 BECK AVE	NO HOLLYWOOD	STANFORD U	MATH	2
	SPECK PATRICIA L	2621 SWEETWATER RD	NAT CITY	HEIDLBURG C	GENE	1
	STUPIAN GARY W	6373 N PROVENCE ROAD	SAN GABRIEL	CAL TECH	PHYS	1
	SWANSON JOHN R	1131 E 6TH STREET	ALBANY 10	U CAL BERK	BOTA	3
	SWATEZ GERALD M	1930 BLAKE	BERKELEY 4	U CAL BERK	SOSC	2
	SWEDLUND JOHN B	821 HAMILTON AVE	PALO ALTO	ANTIOCH C	PHYS	1
	TAGLIAFERRI EDWARD	22309 SATICOY STREET	CANOGA PARK	U C L A	PHYS	2
	TALBOTT RICHARD E	417 BOYNTON AVE	BERKELEY 7	U CAL BERK	BPHY	1
	TAYLOR VINCENT D	1814 W 4TH STREET	LOS ANGELES 57	MIT	SOSC	3
	THIAS CONSTANCE D	1348 NO DETROIT ST	HOLLYWOOD 46	STANFORD U	MATH	1
	THOMPSON DOUGLAS S	624 32ND STREET	RICHMOND 2	U CAL BERK	CHEM	1
	TIRRELL STEVEN E	ROUTE 1 BOX 94	KELSEYVILLE	STANFORD U	ENGR	1
	TORCHIA DENNIS A	5772 BENECIA DRIVE	RIVERSIDE	U CAL RIVR	PHYS	1
	TRAPP DONALD L	1116 DRAKE AVENUE	BURLINGAME	HARVEYMUDD	ENGR	1
	TURK LELAND J	3712 E ROBINSON	FRESNO 3	FRESNO ST	EART	1
	ULRICH BRUCE T	5420 MACDONALD AVE	EL CERRITO	CAL TECH	PHYS	1
	UNZELMAN RONALD F	UNIV VILLAGE 18	REDLANDS	REDLANDS U	BCHM	1
	WARD CHARLES D	12232 SOUTH STREET	ARTESIA	U NOR CAR	PSYC	2
	WARME JOHN E	1619 BROCKTON APT 3	LOS ANGELES 25	U C L A	EART	2
	WEBB SAWNEY D	RT 2 BOX 68	THERMAL	U C L A	EART	2
	WEINGART JEROME M	13452 DEBBY STREET	VAN NUYS	MIT	PHYS	1
	WEINSTEIN JOSEPH M	2023 HOOVER AVENUE	OAKLAND 2	U CAL BERK	MATH	2

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>INST</u>	<u>FIELD</u>
CAL	WELSH LAWRENCE B	8413 1/2 CRENSHAW DR	POMONA C	PHYS 1
	WHESTONE WILLIAM D	324 ALTA VISTA	STANFORD U	ENGR 3
	WILCOX BENJAMIN A	933 NAVAJO STREET	OHIO ST U	ENGR 3
	WRIGHT ROBERT D	1630 E PALM AVE	U C L A	BOTA 2
	ZAERR JOE B	1718 BANCROFT WAY	U CAL BERK	BOTA 2
COLO	BEM DARYL J	79 HOLLY STREET	MIT	PSYC 1
	CAMPBELL WILLIAM B	925 16TH ST 2	U COLORADO	PHYS 2
	CONNOR JON J	1221 UNIVERSITY AVE	U COLORADO	PHYS 3
	DWYER DIANE M	1705 REMINGTON ST	U DENVER	BOTA 1
	FENSKE PAUL R	300 32ND	U COLORADO	EART 2
	HANSEN DAVID W	2918 5TH ST	U COLORADO	MATH 2
	JOHNSON ANTHONY E	8050 EMERSON ST	U COLORADO	CHEM 2
	LOTT LAYMAN A	1513 W MOUNTAIN AVE	COLO ST U	PHYS 2
	NUGENT MAURICE J JR	1442 JERSEY STREET	U COLORADO	CHEM 1
	PERRY JAMES W	1403 19TH	U COLORADO	CHEM 2
	POWELL ROBERT L	130 SO 32 STREET	REGIS C	PHYS 2
	STARBUCK DENNIS E	27 SO 10TH AVENUE	FLA ST U	MATH 1
	STRUBLE GORDON L	2315 E 12TH AVENUE	U COLORADO	CHEM 2
	THRAILKILL JOHN V	1168 KEARNEY STREET	U COLORADO	PHYS 2
	TISUE GEORGE T	9 MARMAC	U COLORADO	EART 2
	ULRICH GEORGE E	1050 QUINCE AVE	BELOIT C	CHEM 1
	WEIBEL BARBARA R	1700 COLUMBINE AVE	U COLORADO	CHEM 2
	WILLIAMS ERNEST W	ROUTE 1 BOX 13	U COLORADO	PHYS 1
	WRUCKE CHESTER T	10240 W 34TH AVE	U COLORADO	ZOOL 2
			STANFORD U	EART 2
CONN	BIROSHAK ROBERT V	70 PARKWOOD RD	FAIRFIELD	MATH 1
	BOZAK LILLIAN C	71 CLOVELLY ROAD	MARQUETTE	MATH 1
	BUTLER BRUCE W	2 LINDEN AVE	YALE U	MATH 1
	COLLINS CALDEN B	EAST HAMPTON RD	WESLEYAN U	MCBI 2
	DEFOREST TABER JR	PARKERS PT	YALE U	PHYS 1
	EHRENPREIS CHARLES	1275 CHAPEL STREET	YALE U	MATH 2

CONN	FRANK BRUCE H	36 LINCOLN AVE	NORWICH	NO WESTERN	CHEM	2
	GRELLNER JEANNETTE M	42 COOPERS POND ROAD	STAMFORD	ALB MAGNUS	ZOOL	1
	HELBIG HERBERT F	RFD 1	MANSFIELD	U CONN	PHYS	2
	JODOIN THERESA A	R R 1	PUTNAM	ANNHURST C	MCBI	1
	KOSICKI BERNARD B	103 SOUTH MAIN STREET	MIDDLETOWN	WESLEYAN U	PHYS	1
	LAURER ANNIE L	109 EMILY DRIVE	NEW BRITAIN	YALE U	MATH	2
	LEVINE ELLEN M	120 LINCOLN AVENUE	BRIDGEPORT 4	WASH SQ C	BIOL	1
	MORGAN DAVID L JR	37 CHURCH STREET	SHELTON	YALE U	PHYS	2
	REX ALAN D	RT 2 BOX 138	STORRS	U CONN	BOTA	2
	ROGOFF GERALD L	5 ARCH STREET	NEW HAVEN 11	YALE U	PHYS	1
	SHAPIRO ROBERT H	WEEKS TRAILER PARK	STORRS	U CONN	CHEM	1
	SHERSHIN ANTHONY C	67 PUTNAM PK	GREENWICH	GEORGETOWN	MATH	1
	SNOW JOEL A	R F D 1	MYSTIC	U NOR CAR	PHYS	1
	TEDROW PAUL M	BOX 37 RFD 1	STORRS	MIT	PHYS	1
	TIMENES NICOLAI JR	40 THEROUX AVE	WATERBURY 8	YALE U	MATH	2
	TRASKOS RICHARD T	14 CONNERTON STREET	NEW BRITAIN	U NOTRE D	ENGR	1
	VEBER DANIEL F	167 LINDEN STREET	NEW HAVEN	YALE U	CHEM	1
	VECCHIONE MARIE C	127 MADISON STREET	WATERBURY 6	ALB MAGNUS	CHEM	1
DEL	FRANCIS JAY W	4 DARTMOUTH RD	WILMINGTON 8	JOHNS HOPK	ENGR	1
	HILLER NORMAN W JR	2611 CRESTON PLACE	WILMINGTON 2	U DELAWARE	EART	1
	MATTHEISS PAUL K	900 WEST 30TH STREET	WILMINGTON 2	U DELAWARE	ENGR	1
	RHOADS DAVID G	800 BEAVER VALLEY RD	WILMINGTON 3	BRANDEIS U	SCHEM	2
	SMITH ROBERT E	11 DELAWARE AVENUE	LEWES	U ALABAMA	BIOL	2
	WALKER JOHN A	38 LAUREL AVENUE	NEWARK	U DELAWARE	ENGR	1
	WHITE JAMES W	2514 PHILADELPHIA PK	CLAYMONT	U DELAWARE	ENGR	1
D C	AGRESTI DAVID G	6343 OAKLAWN ROAD	WASHINGTON 22	CAL TECH	PHYS	2
	BUCY RICHARD S	800 21ST STREET	WASHINGTON 6	AMERICAN U	MATH	1
	COURTNEY JOHN C	1513 A ST S E	WASHINGTON 3	CATHOLIC U	ENGR	1
	DONNELLAN JOHN R	3624 NICHOLS AVE S E	WASHINGTON 24	U MARYLAND	PHYS	2
	ERDAHL ROBERT M	7072 WYNDALE ST N W	WASHINGTON 15	PRINCETON	CHEM	2

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>INSTITUTION</u>	<u>FIELD</u>
D C	GERIG STEPHEN R	3011 ALBEMARLE ST N W	HARVARD U	MATH 1
	JOHNSTON WILLIAM D	1620 RIGGS PLACE N W	U BRUSSELS	PHYS 2
	SCHWAB FREDERIC L	3819 JENIFER ST N W	DARTMOUTH	OCNG 1
	SHIRVEN RAYMOND M	2124 EYE ST N W	GEO WASH U	BPHY 2
FLA	AARON RICHARD L	236 N W 36 CT	U MIAMI	BIOL 2
	BEVIS JEAN H	1315 1/2 N W 6 PLACE	U FLORIDA	MATH 1
	BROWN IRENE V	531 BELLEVUE AVENUE	BETH COOKM	ZOOL 1
	CHOATE WILLIAM C	5801 ALTON RD	U FLORIDA	ENGR 1
	COLT LEBARON C JR	4081 BARBAROSSA AVE	MIAMI ST U	BOTA 2
	DEEDS JOSEPH B	5242 AVE DEL MARE	U MICHIGAN	MATH 2
	FABER KAREN E	1296 SEMINOLE DR	DUKE U	SOSC 1
	FAUST DOROTHY C	1212 CORTEZ ST	SWARTHMORE	PSYC 1
	FRAZIER STEPHEN E	424 PINEAPPLE STREET	FLA SO C	CHEM 1
	FULLAGAR PAUL D	1011 N W 10TH AVE	U ILLINOIS	EART 2
	GREENAN JAMES H	1901 S W RIVERSIDE DR	U NO DAK	PHSL 1
	HARRELL ROBERT L	522 N 11TH STREET	HAMPTON I	CHEM 1
	HILL LUCILLE	ROUTE 1	U FLORIDA	BCHM 1
	HORWITZ BARBARA A	16050 N E 12TH AVENUE	U FLORIDA	PHSL 1
	KALIL MILLICENT L	10108 N E 1ST AVE	WELLESLEY	BOTA 1
	KOZAKOFF DIMITRI	5822 S W 59TH ST	U MIAMI	PHYS 1
	LIPSCOMB DONN B	300 1ST STREET N	GA TECH	PSYC 1
	MARABLE NINA L	4123 LONDON ROAD	AGNES SCOT	CHEM 1
	MARCUS ALVIN B	365 N HIBISCUS DR	MIT	CHEM 3
	MCKINNEY TED M	1021 N W 38 STREET	CORNELL U	CHEM 2
	MEYER JAMES W	1142 MILAN AVE	ANTIOCH C	PHYS 1
	MOORE THOMAS A	3928 DUPONT CIRCLE	GA TECH	PHYS 1
	ROGERS ARTHUR H JR	BOX 306 LOCKHART BRCH	MIT	PHYS 1
	ROHLFING DUANE L	1231 W CAROLINA ST	FLA ST U	BCHM 3
	SCHWITZ WILLIAM J JR	1485 SO MIAMI AVE	U MIAMI	OCNG 1
	SISTRUNK FRANCIS	ROUTE 1 BOX 334	U MIAMI	PSYC 2
	STEWART KENT K	307 ROOSEVELT	FLA ST U	BCHM 2
	TAKEN ED H	835 W PENSACOLA	FLA ST U	PHYS 1
	UMAN MYRON F	160 BOSPHORUS AVE	PRINCETON	ENGR 1
			MIAMI	
			GAINESVILLE	
			DAYTONA BEACH	
			MIAMI BEACH	
			MIAMI 33	
			SARASOTA	
			FT LAUDERDALE	
			CORAL GABLES	
			TARPOON SPRINGS	
			GAINESVILLE	
			FT LAUDERDALE	
			FORT PIERCE	
			JENNINGS	
			NO MIAMI BEACH	
			MIAMI SHORES	
			MIAMI 43	
			ST PETERSBURG	
			JACKSONVILLE 7	
			MIAMI BEACH	
			MIAMI 37	
			CORAL GABLES	
			JACKSONVILLE 5	
			ORLANDO	
			TALLAHASSEE	
			MIAMI	
			ODESSA	
			TALLAHASSEE	
			TALLAHASSEE	
			TAMPA 6	

FLA	VANZANT HOWARD C VICKERS THOMAS J WILLIAMS DAVID G	APT 219 R FLAVET 3 2936 S W 65 AVE 3100 N W 1ST AVENUE	GAINESVILLE MIAMI 55 GAINESVILLE	U FLORIDA SPRING HILL U MICHIGAN	ENGR 3 CHEM 1 PHYS 1
GA	ALEXANDER MARGERY F CLEGG THOMAS B COTLEY CAVIN O DAVIS ROBERT HILLIARD SAM B HUBBARD WILLIAM M JR KNIGHT WALLACE S LITCHFORD ROBERT G MARSHALL ALLINE B MCCULLAGH LENORE N MICHAELS GENE E PHILIP MARGARET V PICKERING NANCY H SULZER ALEXANDER J	3889 DRURY DRIVE 2900 COCKLEBUR RD 20 ESQUILINE DR CLOVERHURST AVE 2182 MELANTE DR N E 217 BRIARCLIFF ROAD 9 EASY ST 410 SOCIETY AVENUE 1650 CLISTON ROAD 229 MILLEDGE HALL PINE TREE DRIVE 1585 EMORY RD N E 3711 CANADIAN WAY	MACON DECATUR COLUMBUS ATHENS BOWERSVILLE ATLANTA 5 WARNER ROBINS STATESBORO ALBANY ATLANTA 6 ATHENS LAGRANGE ATLANTA 6 TUCKER	EMORY U EMORY U VANDERBILT U GEORGIA U GEORGIA GA TECH U GEORGIA RICE INST EMORY U EMORY U U GEORGIA AGNES SCOT EMORY U EMORY U	PSYC 2 PHYS 1 MATH 1 BIOL 2 SOSC 2 PHYS 3 MATH 1 ZOO 2 BOTA 2 CHEM 1 MCBI 2 CHEM 1 PSYC 2 ZOO 2
HAWA	OTA ASHER K	86 439 PUUHULU ROAD	WAIANAE OAHU	U HAWAII	ZOO 2
IDA	JENSEN CARL A MORRISON JOHN A PAGE WILLIAM D ROSENKILDE CARL E STRONG WILLIAM J WASSMUTH ROBERT H WELKER JOHN R WHITTING JERRY M	1453 E BRIDGER ST 806 LINDEN DR 226 NORTH LINE STREET BOX 286 455 SO 5TH WEST 402 N GRANT	POCATELLO LEWISTON MOSCOW KAMIAH DRIGGS COTTONWOOD REXBURG MOSCOW	IDAHO ST C MONT ST U U IDAHO U CHICAGO MIT GONZAGA U U IDAHO U IDAHO	CHEM 1 ZOO 2 EART 1 PHYS 2 PHYS 2 MATH 1 ENGR 2 ENGR 3

ILL	KENYON DEAN H	551 S KIMBARK AVE	CHICAGO 37	U CHICAGO	BPHY	1
	KERNS RAYMOND L JR	168 VHP CHAUTAUGUA ST	CARBONDALE	SO ILL U	EART	2
	KIRK JEROME R	26 BAKER DRIVE	URBANA	JOHNS HOPK	SOSC	2
	KLOEPEL PETER K	5425 WOODLAWN	CHICAGO 15	U CHICAGO	PHYS	2
	KRAINES DAVID P	6817 CRANDON	CHICAGO 49	OVERLIN C	MATH	1
	KREUSER RICHARD T	ROUTE 1 BOX 306	MUNDELEIN	RIPON C	CHEM	1
	KROPP WILLIAM R JR	4831 N KOSTNER	CHICAGO 30	CASE INST	PHYS	2
	LEBBIN LEROY J	2329 SOUTH 61ST COURT	CICERO 50	HOPE C	MATH	1
	LINDQUIST LOIS C	809 S MARSHFIELD AVE	CHICAGO 12	BRYN MAWR	CHEM	2
	LINK RONALD C	1704 PLEASANT STREET	URBANA	U ILLINOIS	BCHM	1
	LUNDE JOAN E	15215 S ASHLAND AVE	HARVEY	U CHICAGO	BCHM	1
	MADEJ JAMES T	7109 NO MANKATO AVE	CHICAGO 46	KNOX C	MATH	1
	MAGIN RALPH W	127 KANSAS AVENUE	BELLEVILLE	MIT	CHEM	1
	MARTINEK GEORGE W	255 SO MARION	OAK PARK	LOS ANG ST	PHSL	2
	MATKOVICH MICHAEL J	6002 S WINCHESTER	CHICAGO 36	DEPAUL U	PHYS	1
	MCCOMEN MARIE SIS	1026 NO DOUGLAS	BELLEVILLE	URSULINE C	CHEM	1
	MEINTS ELSA	122 S ADAMS STREET	HINSDALE	RADCLIFFE	PHYS	1
	MELNYK ANDREW R	DIXON STATE SCHOOL	DIXON	ST MARYS C	PHYS	1
	MICHEJDA CHRISTOPHER	1442 N TALMAN	CHICAGO 22	U ROCHESTER	CHEM	2
	MILLER MARGARET I	908 EMERSON COURT	MOUNT PROSPECT	MARYCREST	CHEM	1
	MOORE WILLIAM J	941 KEYSTONE AVE	RIVER FOREST	IOWA ST C	EART	1
	MYERS CHARLES W	SO ILLINOIS UNIV	CARBONDALE	SO ILL U	BIOL	2
	NAGEL EDGAR H	1976 SHEPHERD DR	DES PLAINES	NO WESTERN	CHEM	2
	NEMETH EDWARD M	6525 N SHERIDAN ROAD	CHICAGO 26	LOYOLA ILL	CHEM	3
	NORTHROP DAVID A	808 E 58TH STREET	CHICAGO 37	U CHICAGO	EART	2
	NOSANCHUK TERRANCE A	837 E 56	CHICAGO 37	U CHICAGO	SOSC	2
	OLIN JOHN G	5411 N ST LOUIS AVE	CHICAGO 25	ILL I TECH	ENGR	1
	OLSON EARL B	388 ELM AVENUE	ELMHURST	U CHICAGO	BCHM	1
	PAPPADEMOS JOHN N	1415 E 52ND ST	CHICAGO 15	U CHICAGO	PHYS	1
	PARKER ROBERT W	1710 SO PLEASANT	URBANA	U ILLINOIS	PHYS	1
	PENN DAVID R	1225 E 56TH STREET	CHICAGO 37	U CHICAGO	PHYS	2
	PINNEY DON O	R R 2	ROSEVILLE	OKLA ST U	AGRI	2
	POLLAK FRED H	5640 ELLIS AVENUE	CHICAGO 37	U CHICAGO	PHYS	2
	RAYMUND MAHLON	1463 E 56TH STREET	CHICAGO 37	U CHICAGO	PHYS	2
	REED NANCY J	407 OGDEN AVENUE	CLARENDON HILL	STANFORD U	ZOOL	1
	REESMAN RICHARD H	314 EAST JAMES ST	EUREKA	GEO WASH U	EART	1

STATE	NAME	ADDRESS	INST	FIELD
ILL	REILLY DENNIS A	210 S RIDGE	JOHN CARRL	PHYS 1
	RIDDIFORD ALAN W	1318 CAMP AVENUE	CORNELL U	PHYS 1
	ROLEWICZ THOMAS F	8848 EUCLID AVE	C ST THMAS	MDSC 1
	ROSS MARY H	1229 BUCKLIN ST	ROSAARY C	MATH 1
	RUCKER INGO E	11244 S EDBROOKE AVE	ILL I TECH	ENGR 1
	RUDYS STASYS K	4105 S ALBANY AVE	U CHICAGO	ENGR 1
	RUSO JOHN P	1912 OAK AVENUE	EMANU MIS	MATH 1
	SCHAEFER PHILIP W	526 SUNSET RD	NO WESTERN	MATH 1
	SCHMIDT JOHN G	R R 2 OAK GROVE HGTS	SO ILL U	CHEM 2
	SMITH JAMES L	829 E VIRGINIA AVE	CARBONDALE	ENGR 2
	SMITH LOWELL K	107 CALUMET STREET	BRADLEY U	ENGR 2
	SOUTHERN WILLIAM E	153 JOANNE LANE	STANFORD U	BOTA 2
	SPRINGER ARTHUR	1528 GREENLEAF	U MICHIGAN	ZOOL 2
	SPRINGER BERNARD G	7303 S BENNETT AVENUE	ILL I TECH	CHEM 1
	SUMMERFELT ROBERT C	SOUTHERN HILLS APTS	U CHICAGO	PHYS 2
	SWEIG MITCHEL J	6500 N ALBANY AVENUE	SO ILL U	ZOOL 2
	TEXTORIS DANIEL A	509 W MAIN STREET	U CHICAGO	PHYS 2
	THOMPSON DONALD J	1129 N ELMWOOD	U ILLINOIS	EART 2
	TURNER WARREN H	208 UNION RD	MONMOUTH C	EART 1
	TURULA DARIA	7303 W FULLERTON	WASH U STL	EART 1
	WALBRIDGE EDWARD W	1201 WINCHESTER ROAD	ROSAARY C	CHEM 1
	WALLER THOMAS R	7907 CRESSETT DRIVE	U CHICAGO	PHYS 2
	WATERMAN WILLIAM F	5832 N NINA AVENUE	U WISC	EART 2
	WEISSELEDER WOLFGANG	5475 S GREENWOOD AVE	U ILLINOIS	ENGR 1
	WHITE MEDA M	5726 DREXEL	U CHICAGO	ANTH 2
	ZALEWSKI RAYMOND A	2330 W PALMER	U CHICAGO	SOSC 2
	ZAR HOWARD B	36 N LONG AVENUE	ILL I TECH	ENGR 1
			U CHICAGO	PHYS 1
IND	ARNOLD EDOUARD P	1215 WOODWARD AVENUE	CAMBRIDGE U	ENGR 2
	*MOSS DANIEL D	2604 OJIBWAY TRAIL	DUKE U	ENGR 2
	BISSELL ROBERT L	1133 INDIANA ST	NO WESTERN	CHEM 1
	BLEYMAN LEA K	701 E TENTH ST	INDIANA U	PHSL 2
	BOHLIN JOHN D	650 WABASH AVENUE	WABASH C	ASTR 1
	BROGAN M FRANCESCA	IMMACULATE CONCEPTION	ST BENEDCT	BCHM 1

* Out of alphabetical order

IND	BROSHAR WAYNE C	1305 SLOAN	CRAWFORDSVILLE	2	PHYS
	CHAPMAN ROBERT G JR	8019 PETERSBURG RD	EVANSVILLE 11	1	ENGR
	CLELAND CHARLES F	1300 EAST FIRST ST	BLOOMINGTON	1	ZOOL
	COHEN LOIS R	235 WOOD STREET	W LAFAYETTE	2	SOSC
	COLLIGAN JEROME A	3124 LAKE AVENUE	FT WAYNE 3	1	MATH
	CRULL HARRY E JR	3880 FOREST GROVE	INDIANAPOLIS 5	1	MATH
	DANE CHARLES W	259 E SUNSET LANE	WEST LAFAYETTE	2	BIOL
	EDDELMAN HAROLD L	2429 MEADOW DR	MARENGO	1	GENE
	EDGEELL MARSHALL H	303 N 13TH STREET	RICHMOND	2	BPHY
	ELLIS ROBERT L	7145 MONROE AVE	HAMMOND	1	PHYS
	FAISLER WILLIAM L	R R 5	LAFAYETTE	2	MATH
	FELDT ROBERT D	408 SO DUNN STREET	BLOOMINGTON	1	ZOOL
	FISCHEL DAVID	M R 2	VALPARAISO	3	ASTR
	GRAEBNER JOHN E	322 1/2 COLLEGE AVE	INDIANA U	1	PHYS
	GUTTMAN CHARLES M	5750 E NEW YORK ST	RICHMOND	1	CHEM
	HUNTER KING B	129 2 MARSHALL DRIVE	INDIANAPOLIS	1	ANTH
	JENSEN BARTELL C	2605 OXFORD	WEST LAFAYETTE	2	SOSC
	JOHANNINGSMEIER ARTH	205 2 AIRPORT ROAD	LAFAYETTE	2	BIOL
	JOHNSON LOWELL B	R R 1	W LAFAYETTE	1	BOTA
	KINSEY DAVID W	R R 1	SILVER LAKE	1	MATH
	KIRK KENNETH L	208 1/2 N ADAMS	REELSVILLE	1	CHEM
	KLINGER WILLIAM R		MARION	1	MATH
	KLUHE RONALD L	420 VAN BUREN STREET	FERDINAND	1	ENGR
	LEHMAN THOMAS A	3586 TOMPKINS	BERNE	1	BCHM
	MCCAULEY DALE E	335 EVERMANN APT	GARY	1	MATH
	MEGARD ROBERT O	A 8 HOOSIER COURTS	BLOOMINGTON	2	ZOOL
	MENDELSON NEIL H	521 ROOSEVELT STREET	BLOOMINGTON	3	GENE
	METZGER WESLEY J	COUNTRY CLUB PARK	GARY 3	1	PHYS
	MURPHY JOHN F	12 12 ROSS ADE DRIVE	LEBANON	1	ENGR
	ROBERTS ROY J	318 JEFFERSON STREET	W LAFAYETTE	1	ENGR
	RUSSELL JOEL W	514 W 4TH STREET	ELKHART	2	PSYC
	SCHRECK GEORGE L	1121 RIVERSIDE DRIVE	SEYMOUR	1	CHEM
	SIECKMAN ROBERT W	ROUTE 1 BOX 34	SOUTH BEND 16	1	PHYS
	SONS LINDA R	209 9 AIRPORT RD W	CROWN POINT	1	CHEM
	THOMPSON HOWARD D	1005 CLEVELAND AVENUE	LAFAYETTE	2	MATH
	VOIGHT BARRY		SO BEND	1	ENGR
			U MORE D	2	EART
			U MICHIGAN	2	PHYS
			PRINCETON	1	ENGR
			WABASH C	1	ZOOL
			PURDUE U	2	SOSC
			U NOTRE D	1	MATH
			BUTLER U	1	MATH
			PURDUE U	2	BIOL
			PURDUE U	1	GENE
			MIT	1	BPHY
			DUKE U	2	PHYS
			OBERLIN C	1	PHYS
			PURDUE U	2	ZOOL
			INDIANA U	3	ASTR
			VALPARAISO	1	PHYS
			EARLHAM C	1	CHEM
			INDIANA U	1	ANTH
			PURDUE U	2	SOSC
			PURDUE U	2	BIOL
			PURDUE U	1	BOTA
			MANCHESTER	1	MATH
			U WISC	1	CHEM
			TAYLOR U	1	MATH
			PURDUE U	1	ENGR
			BLUFFTON C	1	BCHM
			MANCHESTER	1	MATH
			INDIANA U	3	ZOOL
			INDIANA U	2	GENE
			WABASH C	1	PHYS
			GEO WASH U	1	ENGR
			PURDUE U	1	ENGR
			NO WESTERN	2	PSYC
			INDIANA U	1	CHEM
			MIT	1	PHYS
			INDIANA U	1	CHEM
			PURDUE U	1	MATH
			PURDUE U	2	ENGR
			U MORE D	2	EART

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>INST</u>	<u>FIELD</u>
IND	WEST FREDERICK R JR	331 SOUTH GRANT ST	INDIANA U	ASTR 2
	WHEELER JOSEPH D	147 SHEETZ	PURDUE U	ENGR 3
	WILKES PAUL R	546 RHODE ISLAND	PURDUE U	PHYS 1
	WILLIAMS JUDITH A	414 ELMHURST	INDIANA U	GENE 1
	WOOD JOHN H	2010 N 16TH ST	PURDUE U	SOSC 3
	ZINSMEISTER NELSON L	R R 3	MANCHESTER	MATH 1
IOWA	AKERS RONALD R	ROUTE 2	IOWA ST C	ENGR 1
	ANDERSON WAYNE I	9621 WILLARD CT	ST U IOWA	EART 2
	ATKINSON KENDALL E	1917 46 STREET	IOWA ST C	MATH 1
	BEESON ROBERT E	866 PAMMEL COURT	IOWA ST C	ENGR 1
	CALENTINE ROBERT L	1108 15TH ST	IOWA ST C	ZOOL 3
	CRAFORD MAGNUS G	R R 1	ST U IOWA	PHYS 1
	DOIDGE JEROME G	LUTHER BARRACKS P 1	IOWA ST C	ENGR 2
	DOTSETH KAREN A	149 STADIUM PARK	LUTHER C	MATH 1
	EILERS LAWRENCE J	88 FENNO DR MTD ROUTE	ST U IOWA	BOTA 2
	EVANS THOMAS E	1806 MYRTLE ST	DEPAUW U	BCHM 1
	FORNEY FRED W	716 E SHAWNEE	ST U S DAK	MCBI 1
	FREEMAN DONALD J		GRINNELL C	BOTA 1
	GEER BILLY W		U CAL DAV	GENE 2
	HAYES JAMES D	704 N MAIN STREET	UPR IOWA U	PHYS 1
	HILLS HOWARD K	713 DOUGLAS CT	ST U IOWA	PHYS 1
	JORGENSEN JANET M	109 FINKBINE PARK	U NOR CAR	SOSC 2
	KLAPPER GILBERT J		ST U IOWA	EART 3
	KNUDSON DAVID W	806 17 STREET S W	LUTHER C	MATH 1
	KRIPPNER KENNETH E	1103 HARDING AVENUE	WESTMAR C	PHYS 1
	LEE RONALD S	209 W FILMORE ST	LUTHER C	PHYS 1
	LUTH WILLIAM C	2826 SUNNYSIDE AVENUE	PENN ST U	EART 2
	NIEMANN THEODORE F	OTTUMWA HGTS CONVENT	ST U IOWA	CHEM 1
	REHMANN MARILYN T	639 7TH N E	MARYCREST	BCHM 1
	RUBY WARREN A JR	110 SO VERMONT	U CHICAGO	BPHY 1
	SCHUMANN JOHN R	400 NORTH OKOBOJI AVE	BOWLING GR	EART 1
	SCOTT FRANKLIN J		GRINNELL C	CHEM 1
	SMITH PAUL E	SPIRIT LAKE	ST U IOWA	ZOOL 3
		COGGIN	IOWA ST C	ENGR 1
		KEOKUK	ST U IOWA	EART 2
		DES MOINES 22	IOWA ST C	MATH 1
		DES MOINES	IOWA ST C	ENGR 1
		AMES	IOWA ST C	ZOOL 3
		ONAWA	ST U IOWA	PHYS 1
		CASTANA	IOWA ST C	ENGR 2
		DECORAH	LUTHER C	MATH 1
		IOWA CITY	ST U IOWA	BOTA 2
		BETTENDORF	DEPAUW U	BCHM 1
		STOUX CITY 3	ST U S DAK	MCBI 1
		DES MOINES	GRINNELL C	BOTA 1
		COIN	U CAL DAV	GENE 2
		SHELLSBURG	UPR IOWA U	PHYS 1
		MT PLEASANT	ST U IOWA	PHYS 1
		CLINTON	U NOR CAR	SOSC 2
		IOWA CITY	ST U IOWA	EART 3
		JEWELL	LUTHER C	MATH 1
		CEDAR RAPIDS	WESTMAR C	PHYS 1
		AMES	LUTHER C	PHYS 1
		WINTERSET	PENN ST U	EART 2
		BURLINGTON	ST U IOWA	CHEM 1
		OTTUMWA	MARYCREST	BCHM 1
		MASON CITY	U CHICAGO	BPHY 1
		MAQUOKETA	BOWLING GR	EART 1
		MILFORD	GRINNELL C	CHEM 1
		SPIRIT LAKE	ST U IOWA	ZOOL 3

IOWA	SOULTS DONALD J THOMPSON RICHARD B WALTMANN WILLIAM L	3319 ROSS RD 622 SEERLEY BLVD 123 10TH ST S W	AMES CEDAR FALLS WAVERLY	IOWA ST C IOWA ST TC IOWA ST C	MATH 1 MATH 1 MATH 2
KANS	AUGUST BARBARA J BEYERLEIN ADOLPH L BRYAN DAVID R FLANAGIN VERNON L FOLEY BARBARA K GILLES SCOTT E JONES DONALD W JONES JOSEPH S KNOCHE HERMAN W LESAGE LEO G MANLEY DAVID B MCCUNE RONALD W MCGINSEY LEE R OWENS CHARLES W RINKEL RICHARD C ROBINSON JOHN A ROUSH MARVIN L RUMPEL MAX L SHAFFER BERNARD L SHUTLER NORMAN D STEVENS KARL K STICKER ROBERT E TAYLOR BERT A	1732 NORTH YALE RT 2 1203 W 20TH TERRACE 8418 CHEROKEE LANE 1801 BURNETT RD 1106 POMEROY 810 2ND AVENUE 8541 HIGH DR STAR ROUTE 134 W ELLSWORTH 1300 WOODROW AVENUE 932 MISSISSIPPI 439 SO ST CLAIR CASTLE COURT RURAL ROUTE 2631 MOSSMAN 419 NORTH C STREET RURAL ROUTE 7 SUNNYSIDE APTS 6 E 410 S MADISON	WICHITA 8 PHILLIPSBURG ELKHART GEM LAWRENCE PRAIRIE VILLAGE TOPEKA MANHATTAN STAFFORD CONCORDIA LEAWOOD BELOIT SALINA WICHITA 3 LAWRENCE WICHITA BALDWIN OGALLALA WICHITA ARKANSAS CITY TOPEKA LAWRENCE PLAINVILLE	U WICHITA U KANSAS OKLA ST U U KANSAS U KANSAS U KANSAS ENGR 1 U KANSAS GRAZ U MIT KAN ST U U KANSAS GRINNELL C KAN ST U U KANSAS U KANSAS U KANSAS MIT U MARYLAND U KANSAS U MISSOURI U KANSAS U NEW MEX U KANSAS U KANSAS	PSYC 2 CHEM 2 MATH 2 BOTA 2 SOSC 1 ENGR 1 ZOO 2 CHEM 2 CHEM 3 PHYS 1 MATH 1 BCHM 1 PHYS 1 CHEM 3 BIOL 1 ENGR 1 PHYS 2 CHEM 3 EART 2 ENGR 2 ENGR 2 CHEM 1 CHEM 2 MATH 1
KY	ALLEN GARLAND E AMBROSE HARRISON W BOWEN THOMAS M BRACKETT AUGUST D	900 CHEROKEE RD 219 SO LIME STREET BOX 559 2614 BANK STREET	LOUISVILLE 4 LEXINGTON WHITESBURG LOUISVILLE 12	HARVARD U U KENTUCKY U OKLAHOMA U KENTUCKY	SOSC 1 ZOO 2 ZOO 1 MATH 1

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>INST</u>	<u>FIELD</u>
KY	BREIVOGEL FRANCIS W	1920 CLARK	PADUCAH	CHEM 1
	CORNETT NINA C	ADAMS ST TRAILER PK	BEREA	PHYS 1
	CURTIN MARY E	341 MOCKINGBIRD	LEXINGTON	PSYC 3
	DICKINSON JOSEPH R	115 ST MARYS COURT	GLASGOW	PHYS 1
	KANNER LINDA J	500 CHINOE RD	LEXINGTON	CHEM 1
	LIPS KATHLEEN E	2554 TENNYSON AVE	LOUISVILLE 5	PHYS 1
	OSBORNE THOMAS L	ROUTE 6	PADUCAH	ENGR 1
	PREWITT GERALD B	924 MAIN STREET	COVINGTON	PHYS 1
	RIGSBY BRUCE J	1400 SHINGO AVENUE	LOUISVILLE 15	PHYS 1
	ROWLETTE RALPH M	ROUTE 1	BEREA	ANTH 1
	SCHEWENE CHARLES B	1134 W 33RD ST	COVINGTON	ANTH 2
	SEIBER JAMES N	2028 ALTA AVE	LOUISVILLE 5	CHEM 1
			BELLARMINE	CHEM 1
			U NOTRE D	CHEM 1
			BEREA C	PHYS 1
			U KENTUCKY	PSYC 3
			BELLARMINE	PHYS 1
			U MICHIGAN	CHEM 1
			ST LOUIS U	PHYS 1
			ALA POLY I	ENGR 1
			VILLA MADO	PHYS 1
			U LOUISVLE	PHYS 1
			HARVARD U	ANTH 1
			VILLA MADO	ANTH 2
			CHEM	CHEM 1
			BELLARMINE	CHEM 1
LA	ANDRLE ROBERT F	BOX 12305 LA STATE U	BATON ROUGE 3	BIOL 2
	BURNS MALCOLM L	824 11TH STREET	GREINA	PHYS 1
	HILL CLYDE D	4407 OAK LAWN	LAKE CHARLES	MATH 1
	HOWE ROBERT C	647 L S U AVENUE	BATON ROUGE 8	EART 1
	KELLER CAROL J	6545 GEN DIAZ	NEW ORLEANS 24	BIOL 1
	MCINTIRE ROGER W	4362 SWEET BRIAR	BATON ROUGE 8	PSYC 3
	MORGAN JAMES O	ROUTE 1 BOX 18	KENTWOOD	MATH 1
	NIX JAMES R	ROUTE 2 BOX 152	NATCHITOCHES	PHYS 2
	STAMAND JOSEPH	2039 THIRD STREET	NEW ORLEANS 13	PHYS 2
	STOKES GLENN M	P O BOX 403	RACELAND	PHYS 2
	THEALL GARY E	109 NO JEFFERSON ST	ABBEVILLE	ZOOL 1
	VEITH DANIEL A	1530 BROADWAY	NEW ORLEANS 18	MATH 1
	WILENSKY JANE G	3333 STATE ST DR	NEW ORLEANS 25	PHYS 3
	YASNYI DONALD M	5411 FONTAINEBLEAU DR	NEW ORLEANS 25	ZOOL 1
			HARVARD U	MATH 2
ME	MAGUE JOEL T	PETIT MANAN	MILLBRIDGE	CHEM 1
	TRYON ANN C		POWNAL	CHEM 1
			AMHERST C	CHEM 1
			CLARK U	CHEM 1

MD	ADAMS ROBERT W	2012C RAMBLEWOOD ROAD	BALTIMORE 14	JOHNS HOPK	EART	2
	ALEXANDER RICHARD C	6025 MANNINGTON AVE	BALTIMORE 6	JOHNS HOPK	ENGR	1
	BEACHLEY ORVILLE T	1100 THE TERRACE	HAGERSTOWN	CORNELL U	CHEM	2
	BRAINERD WALTER S	2200 PHELPS RD	ADELPHI	U MARYLAND	MATH	2
	CAVEY EDWARD F	GEORGETOWN PREP SCHL	GARRETT PARK	FORDHAM U	MATH	1
	COLLINS MICHAEL F	3921 CLOVERHILL RD	BALTIMORE 18	JOHNS HOPK	ZOOL	2
	COMPTON PETER A	1442 KANAWHA ST	HYATTSVILLE	U MARYLAND	PHYS	1
	DARROW DAN K	R F D 1	BOWIE	AMERICAN U	BBHY	1
	DEAN MARY G SIS	6300 SMITH AVENUE	BALTIMORE 9	MT ST AGNS	PSYC	1
	FEINBERG ROBERT S	2410 W ROGERS AVENUE	BALTIMORE 9	HARVARD U	CHEM	1
	FLANNERY KENT V	COCKADE FARMS	DARLINGTON	U CHICAGO	ANTH	2
	GLASER JOHN D	5 W 29TH STREET	BALTIMORE 18	JOHNS HOPK	EART	1
	GUERCIO VINCENT J	S MAIN & HOMESTEAD ST	BEL AIR	PRINCETON	CHEM	2
	HAMEL WILLIAM S	514 BEL AIR AVENUE	ABERDEEN	U S N A	PHYS	1
	HARTLINE DANIEL K	PATTERSON ROAD	R D HYDES	SWARTHMORE	BBHY	1
	HAWKES ROLAND K	2825 ST PAUL ST	BALTIMORE 18	JOHNS HOPK	SOSC	2
	HONN JESSIE M	3624 BEECH AVE	BALTIMORE 11	GOUCHER C	PSYC	1
	JULIAN CARL L	815 GREENBRIER ROAD	HAGERSTOWN	CORNELL U	PHYS	2
	LEVIN JEROME A	3203 BROOKLAWN TER	CHEVY CHASE 15	PHL C PHAR	MDSC	1
	LICHTENSTEIN MARTIN	2514 DRUID PARK DR	BALTIMORE 15	JOHNS HOPK	ENGR	1
	LIESKE BRUCE J	7653 GREENLEAF ROAD	HYATTSVILLE	U WASH	MTRL	1
	MILLER IRVIN M	2904 NO ROGERS AVE	BALTIMORE 7	DUKE U	PHYS	2
	NAVIASKY HARRIET J	3902 FORDLEIGH ROAD	BALTIMORE 15	JOHNS HOPK	MATH	1
	PRETL STEPHEN A JR	2109 WOODBOURNE AVE	BALTIMORE 14	LOYOLA MD	MATH	1
	ROACH WILLIAM R	716 CEDARCROFT ROAD	BALTIMORE 12	CORNELL U	PHYS	1
	SNODGRASS HERSHEL B	4209 B KNOX ROAD	COLLEGE PARK	U MARYLAND	PHYS	2
	STEFANIK ROBERT P	2302 LOUISE AVENUE	BALTIMORE 14	R P I	ASTR	2
	STORM CARLYLE B	3126 GUILFORD AVE	BALTIMORE 18	JOHNS HOPK	CHEM	1
	STRAND SUSAN J	4506 JONES BRIDGE RD	BETHESDA 14	AMERICAN U	MATH	1
	TAYLOR LEON J	6 WENDSLOW ROAD	LUTHERVILLE	CARN TECH	ENGR	3
	WARD WILLIAM C JR	2705 MONTEBELLO TERR	BALTIMORE 14	JOHNS HOPK	PSYC	1
	WRIGHT THOMAS W	1907 FAIRBANK ROAD	BALTIMORE 9	CORNELL U	ENGR	2
MASS	AHEARN MICHAEL F	24 LIBERTY STREET	E BRAINTREE 84	BOSTON C	ASTR	1

STATE	NAME	ADDRESS	INST	FIELD
MASS	ATLAS HENRY	17 HURLBUT STREET	HARVARD U	PHYS 3
	AYRES DAVID S	150 QUINCY AVENUE	WILLIAMS C	PHYS 1
	BALL JOHN A	9 ROBERT CIRCLE	HARVARD U	ASTR 2
	BARKER JANE E	635 WASHINGTON ST	WELLESLEY	BIOL 2
	BERES WILLIAM P	125 WASHINGTON ST	MIT	PHYS 2
	BICKFORD LEONARD R	102 CEDAR STREET	MARYVIL C	MCBI 1
	BRENNAN JAMES E	45 NORFOLK RD	BOSTON C	MATH 1
	BROWAND FREDERICK K	35 CUMMINGS RD	MIT	ENGR 2
	BROWN PAUL S	14 ASHTON STREET	MIT	ENGR 3
	BURKE WILLIAM J	319 CONCORD RD	BOSTON C	PHYS 1
	CAGAN ROBERT H	6 HOME STREET	HARVARD U	BCHM 2
	CAIRNCROSS ALLAN	3 WARREN STREET	YALE U	CHEM 3
	CAMPAGNA ARMAND	153 PUTNAM STREET E	NO EASTERN	ZOOL 1
	CAREY GEORGE H	15 PERKINS SQUARE	BOSTON C	CHEM 1
	CLARRIDGE JILL E	3 RUSSET LANE	U MICHIGAN	ZOOL 1
	COLEMAN DAVID L	66 NEWBERT AVE SO	MIDDLEBURY	BPHY 1
	CRANE ROBERT K	400 CENTRAL STREET	MIT	ENGR 2
	CURLEY LILLA M	142 CHURCH STREET	EMMANUEL C	BCHM 1
	DENTON GEORGE H	11 MANCHESTER RD	TUFTS U	EART 1
	DISANTO MADELEINE E	67 PLYMOUTH BLVD	ALB MAGNUS	ZOOL 1
	FAHEY JOSEPH R	319 CONCORD RD	BOSTON C	SOSC 1
	FEAIRHELLER STEPHEN	17 RAYMOND AVENUE	MIT	CHEM 2
	FINK RICHARD D	15 COLLISTON ROAD	MIT	CHEM 3
	FINN PATRICIA A	46 TURNER STREET	BOWLING GR	SOSC 2
	FLEXER ABRAHAM S	80 HARVARD AVE	HARVARD U	GENE 3
	FLINT DOROTHY M	BLANCHARD RD	BOSTON C	PHSL 2
	GAPOCHKIN PETER J	74 SHADE ST	MIT	ASTR 1
	GORDON ROBERT D	8 BENNINGTON STREET	BRANDEIS U	PHYS 1
	GRAB EDWIN L	108 WINTHROP ROAD	BOSTON U	BCHM 2
	HABORAK GEORGE E	319 CONCORD ROAD	BOSTON C	MATH 1
	HARRIS S RICHARD	56 DUFF STREET	BOSTON C	GENE 2
	HOLLAND GEORGE E JR	36 LYNDE	BOSTON C	PHYS 2
	HOYLE BARBARA L	25 THOMPSON STREET	REGIS C	CHEM 1
	JACOBS DIANE M	58 LINNAEAN STREET	RADCLIFFE	MCSC 1
	JAVERY MILTON H	313 BRIDLE PATH	CLARK U	MCBI 1
	JOHNSON SANDRA E	94 OAK STREET	CHESNUT H	GENE 1

MASS	KING JOSEPH H	11 BRACKENBURY STREET	MALDEN 48	BOSTON C	PHYS	1
	KOZAK SAMUEL J	101 ELLIOTT STREET	DANVERS	ST U IOWA	EART	3
	KUHN ROBERT R	35 QUEENSBERRY ST	BOSTON	MIT	CHEM	2
	LAMBERT RICHARD B	SWETT HILL ROAD	STERLING JCT	LEHIGH U	PHYS	1
	LIEBERMAN EDWARD M	21 COWLES LANE	AMHERST	U MASS	ZOOL	2
	MAGUIRE JOHN J	51 EDMUND ROAD	ARLINGTON 74	BOSTON C	PHYS	1
	MANN JOHN R	5 PERHAM STREET	BEDFORD	MIT	ENGR	2
	MANN RICHARD H	35 WEST ELM AVENUE	QUINCY 70	E NAZAR C	CHEM	1
	MATTESON JUDITH C	20 LEWIS AVENUE	GRT BARRINGTON	MARQUETTE	MATH	1
	MCDONNELL MARY E	68 GLEASON ST	WATERTOWN 72	TRINITY C	MATH	1
	MCGARRY FRANCIS J	ROUTE 44	RAYNHAM	BOSTON C	CHEM	1
	MCINTYRE PATRICIA E	17 MECHANIC STREET	ATTLEBORO	EMMANUEL C	MATH	1
	MILLAR P WARWICK	6 SYLVAN STREET	DANVERS	BROWN U	SOSC	1
	MOODY DAVID W	156 FAIR OAKS PARK	NEEDHAM 92	JOHNS HOPK	EART	2
	MORRISON MARY E	480 BROOKLINE AVE	BOSTON 15	EMMANUEL C	PHSL	1
	OSHEA RICHARD L	THIRD STREET	MANCHAUG	WORCESTER	PHYS	1
	PAULSEN DUANE E	54 LEWIS ROAD	BELMONT 78	MIT	CHEM	2
	PHILLIPS CHARLES T	TABOR HILL ROAD	SO LINCOLN	MIT	ASTR	1
	PINSLEY EDWARD A	100 MEMORIAL	CAMBRIDGE 39	MIT	PHYS	2
	PIRAINO MARIA L	51 BREWSTER AVE	S BRAintree 85	EMMANUEL C	ZOOL	1
	PRESKENIS KENNETH J	528 EAST 6TH ST	SO BOSTON	BOSTON C	MATH	1
	RICE MARY E	115 E COTTAGE ST	DORCHESTER	NEWTON S H	MATH	1
	SASNER JOHN J JR	707 WASHINGTON ST	HAVERHILL	U C L A	ZOOL	2
	SAWYER CRAIG D	24 WALNUT STREET	WATERTOWN 72	MIT	ENGR	2
	SEAMON ROBERT E	148 BROOKLINE ST	WORCESTER 3	WORCESTER	PHYS	1
	SEIDMAN AARON	91 TROWBRIDGE ST	CAMBRIDGE 38	BROWN U	BIOL	2
	SHAW WILLIAM M	74 COTTAGE ST	AMHERST	MIT	PHYS	1
	SIVIN NATHAN	68 PEMBERTON SQUARE	BOSTON 8	HARVARD U	SOSC	2
	SIZER NANCY R	10 ALLEYNE STREET	QUINCY 69	REGIS C	PHYS	1
	SMITH ALAN B	66 CHANNING ROAD	BELMONT 78	HARVARD U	ENGR	3
	ST ONGE DAVID L	7 ARDEN RD	WORCESTER 6	WORCESTER	PHYS	1
	STRAX NORMAN	28 LEE STREET	CAMBRIDGE 39	HARVARD U	PHYS	3
	SULLIVAN SABRA	323 PROSPECT STREET	NORTHAMPTON	SMITH C	MATH	1
	SWINIARSKI JOSEPH K	56 FELT ST	SALEM	NO EASTERN	MCBI	1
	TAYLOR STEPHANIE B	MOUNT HOLYOKE COLLEGE	SOUTH HADLEY	MT HOLYOKE	MATH	1
	UOTINEN VEIKKO O	24 WESTMINSTER STREET	WORCESTER	WORCESTER	PHYS	1

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>INSTR</u>	<u>FIELD</u>
MASS	WANG DANIEL I	110 GARFIELD ST	MIT	CHEM 2
	WHEELER ELLSWORTH H	115 MONTAGUE RD	DARTMOUTH	OCNG 1
	WHITE AARON M	139 SO STREET	BRANDEIS U	MCBI 2
	WHITE SALLY A	45 GROSVENOR ROAD	REGIS C	MATH 1
	WHITNEY GEORGE C	40 CHURCHILL STREET	AMHERST C	CHEM 1
	WILKES CHARLES E	MAPLE AVENUE	WORCESTER	CHEM 1
MICH	ABRAHAMSE ALLAN F	110 N THOMPSON	JACKSON	MATH 1
	BEIRNE PATRICK D	16892 MUIRLAND	DETROIT 21	CHEM 2
	BERGGREN MICHAEL J	1509 16TH AVE	MENOMINEE	PHYS 1
	BERGMANN HEDWIG I	1515 HURD ROAD	MONROE	MATH 1
	BERNDT BRUCE C	R 2 BOX 537	STEVENSVILLE	MATH 1
	BERNSTEIN STANLEY C	1460 UNIVERSITY TER	ANN ARBOR	CHEM 2
	BEYER EMANUEL C	19151 SAN JUAN DRIVE	DETROIT 21	CHEM 2
	CALLAHAN ANDREW C	2672 MANISTIQUE	DETROIT 15	GENE 2
	CHARRON LORETTA A	538 NO DIVISION	ANN ARBOR	PHYS 1
	CRAIG MARY E	1410 IROQUOIS	ANN ARBOR	MCBI 1
	DEVOS PETER A	2166 HORTON S E	ANN ARBOR	CHEM 1
	EPEL BERNARD L	3218 CALVERT	GRAND RAPIDS 7	SOSC 1
	FANSELOW JOHN L	3520 OLD COLONY ROAD	DETROIT 6	PHYS 1
	FARBER PHILIP	19983 APPOLINE	KALAMAZOO	PHYS 2
	FINNEGAN STEPHEN A	BOX 166	DETROIT 35	PHYS 1
	FRIEDMAN EUGENE F	3529 SHERBOURNE ROAD	DOLLAR BAY	PHYS 1
	GILVODIS ANTHONY A	9359 MENDOTA	DETROIT 21	EART 1
	GLEICHER GERALD J	414 S DIVISION ST	DETROIT 4	CHEM 1
	GRZELAK THEODORE A	18893 ORLEANS	ANN ARBOR	MATH 1
	GUGEL HAROLD W	530 GEYER ST	DETROIT 3	CHEM 2
	GULLO ROBERT A	14811 NOVARA	FRANKENMUTH	ENGR 2
	HATFIELD ELAINE C	21427 GLENCO	DETROIT 5	MATH 1
	HESSTENES MARSHALL D	212 SO MELBORN	DETROIT 19	MATH 1
	HOCKING RONALD R	4477 CHAMBERLAIN DR	DEARBORN	PSYC 3
	HUFF WARREN D	1119 RUBY AVENUE	BIRMINGHAM	SOSC 2
	JAHN GERALD G	5400 CURTIS RD	HOUGHTON	MATH 1
		2132 N CLINTON	PLYMOUTH	MATH 3
			SAGINAW	EART 2
				MATH 1

MICH	JANKE ROBERT A	405 HURON	HOUGHTON	MICH C MIN	BIOL	1
	JENSEN NORMAN P	800 MAPLEGROVE	ROYAL OAK	U MICHIGAN	CHEM	1
	KAY DAVID C	1905 NEW YORK AVENUE	LANSING 6	MICH ST U	MATH	2
	KERN EDWARD A	2326 N OAKLEY	SAGINAW	OHIO ST U	MATH	1
	KERR JOHN P	9250 KELLY RD E S	PINCKNEY	U MICHIGAN	BIOL	3
	KERWIN M ALICIA SIS	ST MARY CONVNT ELM	MONROE	U MICHIGAN	MATH	2
	KOPP ROGER A	4396 PORT AUSTIN RD	CASEVILLE	U MICHIGAN	ASTR	1
	KOWALSKI DONALD T	5477 ORCHARD	DEARBORN	U MICHIGAN	BOTA	2
	LAUCKNER KURT F	2099 S TELEGRAPH RD	PONTIAC	U MICHIGAN	PHYS	2
	LINDFORS KARL R	2155 BOCK	SAGINAW	U WISC	CHEM	2
	LONG MARY J	412 IVES	BIG RAPIDS	KALAMAZOO	ZOOL	1
	MANSOUR AGNES M SIS	6071 WEST OUTER DRIVE	DETROIT 35	CATHOLIC U	BCHM	2
	MARTIN DAVID G	804 E MICHIGAN	ALBION	ALBION C	PSYC	1
	MCLAUGHLIN CHARLES D	193 MOHAWKE	PONTIAC 18	U MICHIGAN	MATH	1
	MENNINGA CLARENCE	900 BATES ST S E	GRAND RAPIDS 6	WEST MICH	CHEM	2
	MILLMAN MITCHELL W	18655 WILDEMEERE	DETROIT 21	STANFORD U	PHYS	1
	MISCH DONALD W	1450 UNIV TERRACE	ANN ARBOR	U MICHIGAN	ZOOL	3
	MOMOT WALTER T	3311 EDWIN	HAMTRAMCK 17	U MICHIGAN	ZOOL	2
	MYLES EDWARD L	128 GUNSON STREET	E LANSING	MICH ST U	SOSC	2
	NIEDZIELSKI ROBERT J	816 SO JACKSON	BAY CITY	U ILLINOIS	CHEM	3
	NOWLIN JULIA M	1201 W PATERSON	FLINT 4	U MICHIGAN	MATH	1
	PALASZEK MARY D SIS	8200 WEST OUTER DR	DETROIT 19	U DETROIT	CHEM	2
	PATMOS JEAN L	1207 CHERRY STREET	KALAMAZOO 39	WEST MICH	CHEM	1
	PENZ PERRY A	1373 HARVARD	GROSSE PT PARK	BROWN U	PHYS	1
	PERKINS LINDSEY S	4110 CHELSEA CT	MIDLAND	CENT MICH	MATH	1
	PETERSON RICHARD D	44 GROVE STREET	GRAND RAPIDS 5	CALVIN C	MATH	1
	SAML I MARCQUETA H	731 NO WATERLOO	JACKSON	MICH ST U	BCHM	2
	SCHIRCH LAVERNE G	1431 UNIV TERRACE	ANN ARBOR	U MICHIGAN	BCHM	2
	SKAFF MICHAEL S	824 CALVIN AVENUE	GRAND RAPIDS 6	U ILLINOIS	MATH	2
	SMITH HAROLD W	2656 22ND STREET	WYANDOTTE	HARVARD U	CHEM	2
	SPRESSER RALPH G	1448D SPARTAN VILLAGE	E LANSING	MICH ST U	EART	1
	VANDEN BERGE JAMES C	1416 PONTIAC RD S E	GRAND RAPIDS 6	MICH ST U	ZOOL	2
	VANDENBOUT PAUL A	1420 PONTIAC RD S E	GRAND RAPIDS 6	CALVIN C	PHYS	1
	WALDEN MARVIN E	2755 IOWA RD	TROY	WAYNE ST U	MATH	2
	WALKE GERALD J	1738 MURFIN APT 31	ANN ARBOR	U MICHIGAN	MDSC	2
	WEINER SANFORD G	19414 ROBSON	DETROIT 35	MIT	ENGR	1

MINN	NYQUIST LAURENCE E OMAN DONNA M PAYMAR EUGENE M RASKE ARTHUR G RIEKE REUBEN D SCHWEBEL JOSEPH P SMITH FRANKLIN C JR SPARKS BARBARA L STEEN GERALD M THOMAS JAMES A THROCKMORTON JAMES R TURNQUIST TRUMAN D WILLIAMS LILA M WOLF CALVIN J	R R 2 566 E WHEELLOCK PKWY 671 WOODLAWN 1809 GIRARD AVE S 2046 JEFFERSON 2123 STANFORD AVENUE 1925 JAMES AVE SO 221 EAST MAIN 1112 9TH AVENUE 1514 7TH ST S E BOX 104 1013 2ND STREET N W 819 NO JEFFERSON	TRACY ST PAUL 1 ST PAUL 16 MINNEAPOLIS 5 FAIRFAX ST PAUL 5 ST PAUL 5 MINNEAPOLIS 5 ALBERT LEA INTL FALLS MINNEAPOLIS 14 GRASSTON ROCHESTER NEW ULM	MACALESTER ST CATH C U MINN U MINN U MINN U MINN ST MARYS C C ST THMAS STANFORD U MINN ST TC U WISC U MINN BETHEL C S BELOIT C U NOTRE D	PHYS 1 CHEM 1 PHYS 1 ZOO 2 CHEM 1 MATH 1 PHYS 1 PSYC 1 PHYS 1 BCHM 1 CHEM 1 CHEM 1 MCBI 1 ENGR 1
MISS	STEGENGA MARTIN E TANNER ARTHUR C	BOX 77 STATION A 110 JACKSON AVE	HATTIESBURG NEW ALBANY	MISS SO C U MISS	MATH 1 MATH 1
MONT	CLAGUE FRED R COONEY CLINTON J	1007 24TH STREET W	BILLINGS JOLIET	WALLAWALLA MONT ST C	PHYS 1 CHEM 1
MO	ALT LEROY H ASHFORD NICHOLAS A BAKER NORMA J BLAIR CHARLES M BOCKRATH RICHARD C BOWER RICHARD B CONNETT WILLIAM C CUSHING EDWARD J ELDER RICHARD C	BOX 31 7009 CORNELL 1008 SIDNEY STREET 9927 LITZSONGER ROAD 6204 MARWINETTE 1412 PANNELL STREET 5277 LINDELL 6058 KINGSBURY	PACIFIC UNIV CITY 30 ST LOUIS 4 LADUE 24 ST LOUIS 16 COLUMBIA ST LOUIS 8 STEELVILLE ST LOUIS 12	U MISSOURI U CHICAGO SO EAST MO RICE INST YALE U U MISSOURI GEORGETOWN U COPENHGN ST LOUIS U	PHYS 1 CHEM 2 MATH 1 CHEM 1 BPHY 1 PSYC 1 MATH 1 EART 3 CHEM 1

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>INST</u>	<u>FIELD</u>
MO	ENGEL JAMES F	5106 MICHIGAN	KANSAS CITY	BCHM 1
	EVANS MARILYN J	8722 FLORENCE AVE	BRENTWOOD 17	MATH 1
	FISHER CHARLES R	R 4	CARROLLTON	MDSC 1
	FLINT DONALD R	3515 E 41ST	KANSAS CITY 30	BCHM 1
	HARDY JOHN W JR	712 ELM TREE LA	KIRKWOOD 22	MATH 1
	HEIDEMANN ROBERT A	2340 DODIER STREET	ST LOUIS 7	ENGR 3
	HODGE DONALD R	ROUTE 7 BOX 550	SPRINGFIELD	PHYS 1
	JAMES PHILIP B	601 W 70TH TERRACE	KANSAS CITY	PHYS 1
	LEMMON ALAN V	420 MELVILLE AVENUE	ST LOUIS 30	MATH 2
	LEONARD CAROL A SIS	4126 PAGE BLVD	ST LOUIS 13	ANTH 1
	LINCK ROBERT G	1101 WHITECLIFF	KIRKWOOD 22	CHEM 2
	LOMBARD GRACE M	16 BROOKWOOD ROAD	ST LOUIS 31	MATH 1
	MAY WILLIAM L	635 SALEM AVENUE	ROLLA	MATH 1
	MCKNAUGHTON SAMUEL J	4 4 COLLEGE HEIGHTS	MARYVILLE	BIOL 1
	MERSMANN HARRY J	2921A BRANNON AVENUE	ST LOUIS 39	ZOO 2
	MILLER SHIRLEY A	1414 WALL STREET	JOPLIN	ZOO 1
	MUSGRAVE JOHN C	518 NORTH PEARL	U KANSAS	MATH 1
	PERLMAN MELVIN L	7725 HOLMES RD	KANSAS CITY	ANTH 3
	RUCKER JAMES B	3550 PINE GROVE	ST LOUIS	EART 2
	SCHHELP RICHARD H		EMMA	MATH 2
	SCHLEMPER ELMER O	5739 CLEMENS AVE	ST LOUIS 12	CHEM 1
	SPECTOR RICHARD M	901 SO MERAMEC	CLAYTON 5	PHYS 3
	STARR JOHN E	6645 UNIVERSITY DRIVE	UNIV CITY 30	CHEM 1
	WEIDMAN STUART W	3916 DUNNICA	ST LOUIS 16	CHEM 2
NEBR	FOLEY JAMES A JR	3125 TOUZALIN	LINCOLN 7	SOSC 2
	MCCOY GLEN E	101 W 12TH STREET	FREMONT	MATH 1
	PHILLIPS THOMAS W	909 NORTH 67TH STREET	LINCOLN 5	PHYS 1
	THOMAS PAUL A	410 W 29TH STREET	BELLEVUE	ZOO 2
	THURBER JEAN L		BURWELL	MATH 1
	TREPKA ROBERT D	RFD 2	DORCHESTER	CHEM 1
			U WASH	SOSC 2
			MIDLAND C	MATH 1
			MIT	PHYS 1
			U NEBRASKA	ZOO 2
			NEB WSLY U	MATH 1
			GRINNELL C	CHEM 1

NEV	KLIN M CORNELIA MELZ PETER J	BOX A 1340 FALAND WAY	SEARCHLIGHT RENO	RICE INST STANFORD U	EART PHYS	2 1
N H	DOUGLAS JAMES HART GEORGE E JR MAYNARD NELSON C MOORE DENNIS W NORMAN MAURICE F OMALLEY ROBERT E JR PAGE NORMAN J ROEDER STEPHEN B ZEHR DAVID R	C/O VADM A G BISSET RFD 3 BOX 298 12 ALLISON ST 7 FACULTY ROAD 40 SACHEM VILLAGE 79 PROSPECT ST 22 W WHEELLOCK ST P O BOX 463	SILVER LAKE LACONIA CONCORD DURHAM WEST LEBANON SOMERSWORTH MELVIN VILLAGE HANOVER HANOVER	R P I U MICHIGAN MIT HARVARD U DARTMOUTH U NEW HAMP DARTMOUTH DARTMOUTH DARTMOUTH	ENGR AGRI ENGR OCNG MATH MATH EART CHEM ZOO	2 1 1 1 1 2 1 1 1
N J	ADELBERG CAROL AESCHLIMANN ANNE B ASSAYKEEN TATIANA A BENINTENDI ROSEMARY BLUMETTI ROSEMARY F BRAIN JOSEPH D BRILL WINSTON J BROWN CLARENCE L III BROWN HARRY L JR BUSTIN WILLIAM M CALLANAN JANE E SIS COOLEY LINDA H DIZIKI ARLENE M DOLGIN BRENDA E DUFFY RICHARD J EMPTAGE MICHAEL R FERRARI LAWRENCE A FILLION ROSS D FITZGERALD JERRY M	79 EAST 36 STREET 77 MYRTLE AVE 7 FREMONT ROAD 979 ALPINE DRIVE 74 WILLIAMS AVENUE 9 BERTRAND DR 44 WAINWRIGHT STREET 29 FITHIAN AVENUE 45 WEST PARK AVE 21 MOUNTAIN AVE CONV OF ST ELIZABETH SPRING HOLLOW ROAD 383 AVENUE E 2562 BAIRD BLVD 672 ANDERSON AVENUE 7435 BLVD EAST 100 FIRST STREET 226 KING ST 410 BUTLER AVENUE	PATERSON 4 MONTCLAIR SUMMIT TEANECK JERSEY CITY 4 WAYNE NEWARK 12 MERCHANTVILLE LINDENWOLD SUMMIT CONVENT STA FAR HILLS BAYONNE CAMDEN 5 CLIFFSIDE PARK N BERGEN WOOD RIDGE PRINCETON PRINCETON	U CHICAGO OXFORD U TRINITY C MT ST VINC C ST ELIZ TAYLOR U RUTGERS U COLGATE U STANFORD U STEVENS IN FORDHAM U SWARTHMORE CHESNUT H BRANDEIS U STEVENS IN HARVARD U STEVENS IN PRINCETON PRINCETON	BPHY MISC MISC MATH CHEM CHEM PHYS MCBI MATH ENGR PHYS CHEM MATH BIOL PHYS CHEM PHYS PSYC CHEM	1 1 1 1 1 1 1 1 2 2 2 1 1 1 2 2 2 2 2 3

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>INST</u>	<u>FIELD</u>
N J	FOGAROLI RICHARD P	37 HONEYMAN DRIVE	SUCCASUNNA	ENGR 1
	GILLEN MAUREEN A	55 PLEASANT PL	KEARNY	CHEM 1
	GODBY SUSAN A	2020 MOUNTAIN AVE	SCOTCH PLAINS	MATH 1
	HELPERT EDWARD P	2 NORMANDY BLVD WEST	MORRISTOWN	ENGR 1
	HENDNESS RAYMOND W	218 B HARRISON STREET	PRINCETON	CHEM 2
	HOOKER ROGER L	492 HIGHLAND AVE	UPPER MONTCLAIR	EART 1
	HUNT EARLE R	322 COOPER LANE	NEW BRUNSWICK	PHYS 3
	HURST WILBUR S	318 E CENTRAL AVENUE	MOORESTOWN	PHYS 1
	KINSEL TRACY S	110 WOODLAWN AVE	SOMERVILLE	PHYS 3
	KRAUS ROBERT J	913 17 ST	UNION CITY	ENGR 1
	LANDI VINCENT R	SPRINGHILL RD	SKILLMAN	CHEM 2
	LEWIS ANTHONY R	1011 SHEFFIELD ROAD	TEANECK	PHYS 1
	MACDOUGALL JOHN A	632 THOREAU TERRACE	UNION	PSYC 1
	MANLEY MYRON B	227 C MARSHALL ST	PRINCETON	PSYC 2
	MONDSHEIN LEE F	1398 RIVER ROAD	WEST ENGLEWOOD	MATH 2
	NEWMAN RICHARD L	R D 2	FLEMINGTON	CHEM 2
	OBRIEN FRANCIS D	108 STORMS AVE	JERSEY CITY 6	PHYS 1
	OESCHGER MAX P	21 MOUNTAIN TRAIL	SPARTA	PHYS 2
	PALMER JOHN J	212 N MAIN STREET	WOODSTOWN	BCHM 1
	PLEVAN ROBERT E	YOUNGS ROAD	RANSEY	MATH 1
	PRUDEN BRENDA L	306 WARWICK AVE	SO ORANGE	ENGR 1
	SACHS DAVID A	394 10TH AVENUE	PATERSON	PHYS 1
	SCHROEDER LEE S	314 ELM ST	MOORESTOWN	PHYS 1
	SLADE MARGARET E	17 FRONT ST	MIDDLEBUSH	PHYS 1
	SMITH NATHANIEL B	253 PROSPECT AVENUE	PRINCETON	MATH 1
	STRUZYNSKI RAYMOND E	104 MORRIS STREET	JERSEY CITY 2	MATH 1
	TAUB AARON M	783 BOULEVARD	BAYONNE	PHYS 2
	TORO RICHARD F	11 FAIRVIEW AVE	SOUTH RIVER	GENE 2
	TRUTT DAVID	12 HARRISON ST	MORRISTOWN	ENGR 1
	VALA MARTIN T	789 STELTON STREET	TEANECK	ENGR 2
	VAUGHAN MARY F	1 GRAND VIEW TERRACE	TENAFLY	MATH 2
	WALSH THOMAS E	10 ALEXANDER AVE	KEARNY	MATH 1
	WATTS RICHARD B	157 PROSPECT PLACE	RUTHERFORD	PHYS 2
	WEIBRECHT WALTER E	290 POTTER PLACE	WEHAWKEN	PHYS 3
	WESNER JOHN W JR	64 DOGWOOD LANE	BERKELEY HGTS	CHEM 2
	WHITLOCK HERBERT I	809 FEATHERBED LANE	CLARK	ENGR 3
			C WOOSTER	MATH 1
			VILLANOVA	ENGR 1
			CHESNUT H	CHEM 1
			GEORGIAN C	MATH 1
			RUTGERS U	ENGR 1
			PRINCETON	CHEM 2
			HARVARD U	EART 1
			RUTGERS U	PHYS 3
			ALBION C	PHYS 1
			RUTGERS U	PHYS 3
			RUTGERS U	PHYS 3
			RUTGERS U	ENGR 1
			MIT	CHEM 2
			MIT	PHYS 1
			KNOX C	PSYC 1
			PRINCETON	PSYC 2
			HARVARD U	MATH 2
			STEVENS IN	CHEM 2
			ST PETERS	PHYS 1
			JOHNS HOPK	BCHM 2
			U VIRGINIA	MATH 1
			R P I	ENGR 1
			WELLESLEY	PHYS 1
			MIT	PHYS 1
			DREXEL INS	PHYS 1
			VASSAR C	MATH 1
			U CAL BERK	MATH 1
			STEVENS IN	MATH 1
			U BUFFALO	PHYS 2
			LAFAYETTE	GENE 2
			BROWN U	ENGR 1
			U CHICAGO	MATH 2
			MANHATNVIL	MATH 2
			JOHNS HOPK	PHYS 1
			PRINCETON	PHYS 2
			CORNELL U	PHYS 3
			CARN TECH	CHEM 2
			C WOOSTER	ENGR 3
			C WOOSTER	MATH 1

N J	WRENN MCDONALD E	CHESTNUT RIDGE ROAD	SADDLE RIVER	U NEW MEX	PHYS	1
N M	ARMSTRONG DALE D	4880 C YUCCA	LOS ALAMOS	U NEW MEX	PHYS	2
	ATKINSON RICHARD F	307 ARVADA AVE N E	ALBUQUERQUE	U CHICAGO	CHEM	1
	FLYNN EDWARD R	2250B 38TH STREET	LOS ALAMOS	U NEW MEX	PHYS	2
	FRAGA ROBERT J	957 48TH STREET	LOS ALAMOS	POMONA C	MATH	1
	GRIEGO RICHARD J	1200 A ORTIZ S E	ALBUQUERQUE	U NEW MEX	MATH	1
	HUNTER JOHN E	302 STANFORD S E	ALBUQUERQUE	U NEW MEX	PSYC	1
	MORGAN A MIRIAM	905 N BUENA VISTA	FARMINGTON	AUSTRLN U	ZOOL	2
	MOTTELER ZANE C	P O BOX 519	LOS ALAMOS	U NEW MEX	MATH	2
	MUDD ROSEMARY B	608 CEDAR N E	ALBUQUERQUE	U NEW MEX	ANTH	1
	ORY OTHELLO J JR	ST MICHAELS COLLEGE	SANTA FE	ST MARYS U	PSYC	1
	PALMER HAROLD G	P O BOX 1584	UNIV PARK	N MEX ST U	PHYS	1
	RICHARDS CLYDE N	1825 FLORIDA N E	DORA	U ARIZONA	PHYS	2
	SELF GLENDON D	BORREGO PASS TRD POST	ALBUQUERQUE	U ARKANSAS	MATH	1
	SMOUSE DEFORREST	822 E 2ND ST	PREWITT	BRIG YNG U	EART	2
	TALLEY THURMAN L	817 MANZANO N E	PORTALES	FLA ST U	PHYS	2
	THOMPSON JACK E	3242 A WALNUT STREET	ALBUQUERQUE	U NEW MEX	ENGR	1
	THURSTON RODNEY S	P O BOX 659	LOS ALAMOS	U NEW MEX	ENGR	2
	VIGIL JOHN C		ESPAÑOLA	N MEX INST	PHYS	1
N Y	ADAMO JOYCE A	215 EAST ELISHA ST	WATERLOO	NAZARETH C	MATH	1
	ALLEN GEORGE D	105 THE VINEYARD	ONEIDA	U MICHIGAN	SOSC	2
	ALLEN HARRY P	1531 E 3RD STREET	BROOKLYN 30	YALE U	MATH	2
	ALMAST GEORGE S	226 RIDGEWOOD DRIVE	SYRACUSE 6	SYRACUSE U	PHYS	1
	ANDERSON ALFRED T	51 HARVARD STREET	GARDEN CITY	PRINCETON	EART	2
	ANDREWS MERRILL L	556 WASHINGTON AVE	ALBANY 3	MIT	PHYS	2
	ANTMAN STUART S	20 LOEL COURT	ROCKVILLE CNTR	R P I	MATH	1
	ARENS JOHN F	P O BOX 72	ARDSLEY ON HUD	MIT	PHYS	1
	BALKIN JOSEPH L	1520 ARCHER ROAD	NEW YORK 62	CITY C N Y	PHYS	1
	BECKER JOHN A	79 02 19TH RD	JACKSON HGTS	FLA ST U	PHYS	3
	BEER MICHAEL	119 20 UNION TURNPIKE	KEW GARDENS 15	OHIO ST U	PSYC	2

N Y	COLSON JAMES G	272 OAKRIDGE	KENMORE 17	U BUFFALO	CHEM	2
	CONNOLLY FRANCIS X	45 CRESCENT AVE	STATEN ISLAND	FORDHAM U	MATH	1
	COOPER WILLIAM W	725 CROTON ST	ROME	CORNELL U	ENGR	1
	CRAMER WILLIAM A	168 WEST 86TH STREET	NEW YORK 24	U CHICAGO	PHYS	2
	DAKSS MARK L	211 KENSINGTON OVAL	NEW ROCHELLE	COLUMBIA U	PHYS	2
	DATRI JOSEPH E	1821 MADISON PLACE	BROOKLYN 29	PRINCETON	MATH	3
	DECICCO PETER D	35 CLERMONT AVENUE	PORT CHESTER	AMHERST C	PHYS	1
	DELILLO NICHOLAS J	2429 BOUCK AVE	NEW YORK 69	MANHATTAN	MATH	1
	DESHOWITZ NETTA K	1620 53RD ST	BROOKLYN 4	BROOKLYN C	PSYC	2
	DESAPIO RUDOLPH V	1822 GREENE AVENUE	BROOKLYN 37	U CHICAGO	MATH	2
	DINNEEN DAVID A	171 CASTLE RIDGE RD	MANHASSET L I	HARVARD U	SOSC	3
	DOHRING JOHN D	103 26 110 STREET	RICHMOND HILL	MARITIME C	ENGR	1
	DOLAN JOSEPH F	36 TRAFALGAR STREET	ROCHESTER 19	ST BONA U	ASTR	1
	DOUD JOAN M	411 74 ST	BROOKLYN 9	ST JOS NY	MATH	1
	DREYFUSS JACQUES	1311 RALEIGH RD	MAMARONECK	JOHNS HOPK	BCHM	2
	EDWARDS WARREN C	190 THAYER ST	JAMESTOWN	ST U NY TC	MATH	2
	EKMAN KATHLEEN E	365 DEPOT RD	HUNTINGTON STA	ST LAWR U	ZOOL	1
	FALLON THOMAS J	836 FLATBUSH AVENUE	BROOKLYN 26	ST PETERS	MATH	1
	FANTINO EDMUND J	33 35 76 STREET	JACKSON HGS 72	CORNELL U	PSYC	1
	FARRIS GEORGE F	894 COLVIN AVENUE	KENMORE 23	YALE U	PSYC	1
	FELS STEPHEN B	315 E 68TH STREET	NEW YORK 21	HARVARD U	PHYS	1
	FISHMAN THELMA	1146 EAST 26TH ST	BROOKLYN 10	BARNARD C	PHYS	1
	FRANCIS WILLIAM P	60 MAIN STREET	ATTICA	R P I	PHYS	1
	FRIEDMAN JOAN	87 50 111 ST	RICHMOND HILL	QUEENS C	CHEM	1
	FRUCHTER AARON S	1126 51 ST	BROOKLYN 19	YESHIVA U	CHEM	1
	GAFNEY LEO J	LOYOLA SEMINARY	SHRUB OAK	FORDHAM U	MATH	1
	GARDNER ALBERT H	101 PECK COURT	SYRACUSE 10	SYRACUSE U	PSYC	3
	GELL MAURICE	2111 BEEKMAN PLACE	BROOKLYN 25	COLUMBIA U	ENGR	1
	GIBIAN MORTON J	262 N FULTON AVENUE	MT VERNON	MIT	CHEM	2
	GIBSON JAMES H	22 KELLY STREET	ROCHESTER 5	U C L A	MATH	1
	GINSBURG ARLEEN	205 11 34 AVENUE	BAYSIDE 61	QUEENS C	MATH	1
	GLISMANN LORETTA E	321 EAST 31 ST	BROOKLYN 26	FORDHAM U	BPHY	2
	GOLDBY STEVEN D	213 EAST MARKET	LONG BEACH	U NOR CAR	CHEM	1
	GOLDMAN FELICIA	550 J GRAND STREET	NEW YORK 2	BROOKLYN C	MCBI	1
	GOLDSTEIN BYRON B	36 20 BOWNE STREET	FLUSHING 54	CITY C N Y	PHYS	1
	GOODMAN DAVID A	74 GROVE ST	LYNBROOK NASSU	NEW YORK U	PSYC	1

STATE	NAME	ADDRESS	INSTR	FIELD
N Y	GRACIANO MARY E	2912 TILDEN AVENUE	BROOKLYN 26	MATH 1
	GREENWALD RICHARD B	1945 LORING PL	BRONX 53	CHEM 1
	GUILFOYLE RICHARD H	115 WASHINGTON ST	BABYLON	MATH 1
	GURA IRA	947 MONTGOMERY ST	BROOKLYN 13	ENGR 2
	HAAS MICHAEL L	1455 EAST 21 ST	BROOKLYN 10	ENGR 1
	HALL LOREN V	316 CHESTNUT STREET	ONEONTA	MATH 1
	HALPERN NAOMI M	2 BIRCHWOOD COURT	MINEOLA	MATH 2
	HARTE JOHN	635 E LINCOLN AVE	MT VERNON	PSYC 2
	HARTMANN LILLIAN E	19 FRUM AVENUE	YONKERS	PHYS 1
	HASELBAUER PHILIP J	144 CAPEN BLVD	BUFFALO 26	PHYS 1
	HAYES WILLIAM H	24 SHEBAR DR	ISLIP	PHYS 1
	HAYS JAMES D	6 FIRST AVENUE	JOHNSTOWN	BPHY 1
	HENNESSEY MICHAEL B	MT SAINT MARY	NEWBURGH	EART 2
	HENSON CARL P	15 SARGENT DR	SNYDER 26	PHSL 1
	HOCHMAN ELIAS H	142 25 PERSHING CRESC	JAMAICA 35	BCHM 2
	HOFFMAN JOYCE A	1568 E 5TH ST	BROOKLYN 30	PHYS 2
	HOFSTRA RUTH M	16 TALCOTT RD	UTICA	PHYS 2
	HOLMES LEWIS M	19 ELLISON HILLS DR	ROCHESTER 25	MATH 2
	HORNFIELD HOWARD L	79 32 BELL BLVD	BAYSIDE 64	ENGR 2
	HOSKEN ROBERT W	101 25 223 STREET	QUEENS VILLAGE	CHEM 2
	HOUSTON THEODORE W	71 15 34TH AVE	JACKSON HTS 72	PHYS 1
	HULIN CHARLES L	401 N AURORA ST	ITHACA	PHYS 1
	JACKIW ROMAN W	1200 PACIFIC ST	BROOKLYN 16	PSYC 3
	JACKSON TOWELL A	390 RIVERSIDE DR	NEW YORK 25	PHYS 1
	JAED ERIK K	39 ROWE PLACE	NEW HYDE PARK	PHYS 1
	JOHNSON BARBARA A	158 HICKS ST	BROOKLYN 1	BOTA 1
	KAISER RICHARD S	100 THAYER ST	NEW YORK 40	MATH 1
	KANTROWITZ WILLIAM	217 HENRY ST	NEW YORK 2	ZOOL 1
	KAUFMANN NANCY J	2050 ANTHONY AVENUE	NEW YORK 57	ENGR 1
	KELLER KENNETH H	5906 15TH AVENUE	BROOKLYN 19	ZOOL 1
	KENNEDY HUGH P	124 SHERMAN AVENUE	NEW YORK 34	ENGR 2
	KING DONALD L	3417 CANNON PLACE	NEW YORK 63	PHYS 2
	KINZLY ROBERT E	4752 UNION RD	BUFFALO 25	SOSC 1
	KOLOSEIKE ALAN D	112 MAPLEHURST ROAD	ROCHESTER 17	PHYS 1
	KOMISARUK BARRY R	825 GERARD AVENUE	NEW YORK 51	ANTH 1
	KREBS W MICHAEL	425 BRATTLE RD	SYRACUSE 3	BIOL 1
			LEMOYNE C	BCHM 1
			MARYMT C	
			CITY C N Y	
			LONG IS U	
			U ILLINOIS	
			COOPER UNI	
			U WISC	
			OVERLIN C	
			HARVARD U	
			BARNARD C	
			ST JOS PA	
			ARIZ ST C	
			COLUMBIA U	
			VILLANOVA	
			U WISC	
			U MICHIGAN	
			BARNARD C	
			U TENN	
			HARVARD U	
			U CAL BARB	
			POLY BKLYN	
			POLY BKLYN	
			CORNELL U	
			SWARTHMORE	
			COLUMBIA U	
			R P I	
			CITY C N Y	
			POLY BKLYN	
			YESHIVA U	
			BARNARD C	
			JOHNS HOPK	
			U VIRGINIA	
			NEW YORK U	
			U BUFFALO	
			CORNELL U	
			CITY C N Y	
			LEMOYNE C	

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>INST</u>	<u>FIELD</u>
N Y	NECKERS DOUGLAS C	SIS MERCY WILSON PK	U KANSAS	CHEM 2
	NEILLIS JEANNE M SIS	191 BRINKMAN	CATHOLIC U	ZOOL 2
	NEPOKROEFF CARL M	114 LYDELL ST	U BUFFALO	BIOLOG 2
	NEU RICHARD L	418 FRANKLIN STREET	ST U NYSR	AGRI 2
	NEVIN ANDREW E	47 COTTAGE ST	EART	EART 1
	NEWMAN ROGER D	34 20 79TH ST	R P I	ENGR 1
	NEWMAN WALTER S	1373 A ST	NEW YORK U	EART 2
	NOONAN DANIEL C	MARY MOUNT COLLEGE	ST FRANCIS	CHEM 1
	NOZ M DEPADUA MTHR	2982 BAINBRIDGE AVE	MARYMOUNT	PHYS 1
	ODONNELL MAUREEN M	1342 AMHERST STREET	HUNTER C	MATH 1
	OESTREICH ALAN E	276 SO ALLEN STREET	PRINCETON	MATH 1
	ONEIL PETER V	10 BLEECKER STREET	FORDHAM U	MATH 1
	ONEILL THEODORE J	143 MAIN STREET	FORDHAM U	MATH 1
	OSTRANDER LEE E	1657 E 36	HAMILTON C	ENGR 1
	OSTROV ERIC H	2441 JEROME AVENUE	BROOKLYN C	PHYS 1
	OSULLIVAN MICHAEL J	77 GLEN HAVEN RD	MANHATTAN	ENGR 1
	PACE THERESA C	20 CHERRY AVE	LEMOYNE C	BCHM 1
	PALEY ANITA D	STONY LODGE BOX 591	BARNARD C	ZOOL 1
	PALMER DANIEL J	140 THURBER ST APT 4	U NOTRE D	MATH 1
	PANCIROV ROY J	BOX 162 R 2	SYRACUSE U	CHEM 2
	PARKER NANCY J	1777 GRAND CONCOURSE	CORNELL U	ZOOL 2
	PERLSTEIN JEROME H	53 EAST 96TH STREET	BRANDEIS U	CHEM 1
	PHILLIPS ANTHONY V	1480 PARKCHESTER RD	U PARIS	MATH 2
	PLOTKIN NEAL J	6006 FIELDESTON RD	COLUMBIA U	MATH 1
	POCHODA PHILIP M	1455 HARROD AVE	MIT	ASTR 1
	POIGNANT ROBERT V JR	1224 EAST 49 STREET	MANHATTAN	CHEM 1
	POLLACK RICHARD D	2897 DUDLEY AVE	BROOKLYN C	MATH 1
	PORCARO CAROL A	26 16 UNION ST	MARYMOUNT	ZOOL 1
	POSTOW ELLIOT	1021 OUTER DRIVE	CITY C N Y	PHYS 1
	POTTER WILLIAM F	22 WALBROOK ROAD	UNION U	OCNG 1
	POUND JUDITH C	1827 E 27 ST	WELLESLEY	SOSC 1
	PRAGER JUDITH S	311 AVENUE F	VASSAR C	CHEM 1
	RABIN MONROE S	21 31 35TH ST	COLUMBIA U	PHYS 1
	RAFANELLI KENNETH R	181 LEMOX RD	STEVENS IN	PHYS 2
	READER ARTHUR M	1101 WEST STREET	U TEXAS	CHEM 3
	RESNIKOFF MARVIN		U MICHIGAN	PHYS 2

N Y	REYNOLDS DONALD	769 ST MARKS AVE	BROOKLYN 13	LONG IS U	PSYC	1
	RICHTER ROLF	413 DRYDEN RD	ITHACA	CAL TECH	BCHM	1
	RIFKIND JOSEPH M	2180 HOLLAND AVE	NEW YORK 62	YESHIVA U	CHEM	1
	RODRIGUEZ HERMAN R	939 E 28 STREET	BROOKLYN 10	MANHATTAN	CHEM	1
	ROGOZINSKI JOHN	36 SUNNYSIDE ST	BUFFALO 7	YALE U	CHEM	2
	ROLUND MICHAEL W	346 58 ST	BROOKLYN 20	COOPER UNI	ENGR	1
	ROSE FRANK E	162 GRANDVIEW CT	ITHACA	CORNELL U	PHYS	2
	ROTHSTEIN ARI L	319 NEW YORK AVE	BROOKLYN 13	BROOKLYN C	MATH	1
	RUBELL DONALD	570 E 86 STREET	BROOKLYN	CORNELL U	MATH	1
	RUSTIN RANDALL D	603 AMSTERDAM AVENUE	NEW YORK 24	NEW YORK U	MATH	2
	RYTERBAND EDWARD C	77 28 141 ST	FLUSHING 67	QUEENS C	PSYC	1
	RZECZKOWSKI EUGENE J	43 16 194TH STREET	FLUSHING 58	PROVIDENCE	PHYS	1
	SAFFER ARNOLD E	606 UNIVERSITY PARK	ROCHESTER	U ROCHESTER	SOSC	3
	SCHECHESTER PAUL J	1935 83 STREET	BROOKLYN 14	COLUMBIA U	MOSC	1
	SCHLATTERER EDWARD F	2831 FULTON STREET	BROOKLYN 7	U MICHIGAN	BIOL	2
	SCHOEN STEPHEN J	1466 54 ST	BROOKLYN 19	CATHOLIC U	PSYC	2
	SCHOENBERG THEODORE	48 17 42 STREET	L I CITY 4	MIT	ENGR	1
	SCHOMMER M DUSAIN	MARY MOUNT COLLEGE	TARRYTOWN	MARYMOUNT	MATH	1
	SCHULMAN ELLIOTT E	267 E 55TH STREET	BROOKLYN 3	HARVARD U	MATH	2
	SCHULMAN STEPHEN G	26 21 UNION ST	FLUSHING 54	CITY C N Y	CHEM	1
	SEERY VIRGINIA L	222 LITCHFIELD AVE	ELMONT	DUKE U	BPHY	2
	SEIDMAN HUGH S	8101 SHORE RD	BROOKLYN 9	POLY BKLYN	MATH	1
	SEIDMAN LAWRENCE P	1572 EAST 16 STREET	BROOKLYN 30	COOPER UNI	ENGR	1
	SEITELMAN LEON H	749 DRUID PK LAKE DR	BALTIMORE 17	U CHICAGO	MATH	1
	SELIGSON STUART A	156 WEST 86 ST	NEW YORK 24	JOHNS HOPK	MATH	1
	SHAPIRO HARVEY L	64 11 99TH STREET	NEW YORK 74	QUEENS C	MATH	1
	SHERRY HOWARD S	1189 E PARK RD	GRAND ISLAND	U BUFFALO	CHEM	2
	SHORT BARBARA J	190 388 69 AVENUE	FRESH MEADOWS	RADCLIFFE	ENGR	2
	SILVERMAN EDWARD D	86 76 208 STREET	QUEENS VILLAGE	NO WESTERN	ENGR	2
	SOBEL JAY E	79 49 215 STREET	BAYSIDE 64	MIT	ENGR	1
	STAINER HOWARD M	251 55 61ST AVENUE	LITTLE NECK 62	CAL TECH	PHYS	1
	STAUB GUDRUN D	32 03 JUNCTION BLVD	JACKSON HGTS	VASSAR C	BPHY	1
	STECHEER VERA J	6 HOLMES COURT	ALBANY 9	U BUFFALO	MCBI	1
	STEIGMAN GARY	185 MCCLELLAN STREET	NEW YORK 56	CITY C N Y	PHYS	1
	STEINBERG SONIA N	3756 LIBBY LANE	WANTAGH	BRANDEIS U	BIOL	2
	STORCH FLORIAN J	733 9TH AVENUE	NEW YORK 19	MANHATTAN	ENGR	1

<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>INST</u>	<u>FIELD</u>
N Y	STRICKER EDWARD M	1690 METROPOLITAN AVE	NEW YORK 62	CHEM 2
	STRITZEL ARLYS J	159 W 23 STREET	NEW YORK 11	MATH 1
	SUNDERLAND JOHN	79 01 35TH AVENUE	JACKSON HGT 172	PHYS 1
	SZYPULA RICHARD M	80 38 90TH AVE	WOODHAVEN 21	PHYS 1
	TAUB PAUL A	2163 FORD STREET	BROOKLYN 29	ENGR 2
	TEICHLER DORIS	1114 NEW YORK AVE	BROOKLYN 3	MCBI 1
	THIERER IRA	3052 BRIGHTON 4TH ST	BROOKLYN 35	ENGR 1
	THURBER ROBERT E	93 COUNTRY CLUB RD	BELLPORT	PHSL 2
	TOAN BARBARA E	299 ELM ROAD	BRIARCLIFF MNR	EART 1
	TRENCHER JUDITH B	10101 67 DRIVE	FOREST HILLS	PSYC 1
	TROPP BURTON E	1623 52 ST	BROOKLYN 4	BCMH 1
	TURNER MAUREEN B	1135 PELHAM PKWY NO	NEW YORK 69	MATH 2
	TURSHWELL ANITA M	322 ROCKAWAY PARKWAY	BROOKLYN 12	MATH 1
	VANDYCK OLIN B	87 PEMBROKE STREET	ROCHESTER 20	CHEM 1
	VERE VICTOR K		WARNERVILLE	ASTR 1
	VIEBROCK PAUL A	209 BROMPTON RD	GARDEN CITY	EART 1
	WALSH ANNA M	2902 GRAND CONCOURSE	BRONX 58	BPHY 1
	WALSH FRANCIS T	21 38 31 STREET	ASTORIA 5	PHYS 2
	WATHNE THERESA R	177 LOWELL AVENUE	FLORAL PARK	MATH 1
	WATSON JOSEPH W	655 LENOX AVE	NEW YORK 37	PSYC 1
	WETZEN MARY E	796 FAIRMOUNT AVE	JAMESTOWN	CHEM 1
	WHITE WILLIAM W	12 DUSENBERRY ROAD	BROOKLYN 25	PHYS 1
	WINN MARTIN	236 MONTGOMERY STREET	HECTOR	MATH 1
	WRIGHT CHARLES J			CHEM 2
	ZAVELER SAUL A	842 SARATOGA AVE	BROOKLYN 12	CHEM 1
	ZEITLIN ELEANOR M	160 EAST 3RD STREET	NEW YORK 9	MATH 1
	ZWEIG MARILYN B	740 UNIVERSITY PARK	ROCHESTER 20	CITY C N Y 2
N C	ADKINS GEORGE W	1205 CARLTON AVENUE	RALEIGH	MATH 3
	BAYLIS WILLIAM E	601 E MARKHAM AVE	DURHAM	PHYS 1
	BENNER GERELD S	ROUTE 1	COLUMBUS	CHEM 1
	BRANNON CAROLE N	2091/2 MCCAULEY ST	CHAPEL HILL	PSYC 2
	CANNON ROBERT L JR	219 HILL STREET	KINGSTON	MATH 2
	CLARK NANCY L	207 EAST MAIN ST	PLYMOUTH	BOTA 1

N C	DAVIS JOE B	438 W CLEMMONSVILLE	WINSTON SALEM	WESTN CAR C	CHEM	1
	DEANS STANLEY R	ROUTE 5	GOLDSBORO	GUILFORD C	MATH	1
	*SHORE RICHARD E	1021 MINERVA AVE	DURHAM	DUKE U	ZOOL	2
	GERGEN KENNETH J	2803 NATION AVE	DURHAM	DUKE U	PSYC	3
	HARRELSON DWIGHT H	112 E MAIN ST	CERRYVILLE	DUKE U	CHEM	1
	MASSEL GARY A	2322 MCMULLAN CIRCLE	RALEIGH	NO CAR ST	PHYS	1
	NIELSEN PETER T	139 PINECREST ROAD	DURHAM	U NOR CAR	BOTA	2
	PRESTON RICHARD J	3201 CHURCHILL RD	RALEIGH	U NOR CAR	ANTH	1
	ROHDE CHARLES A	2456 WADE AVE	RALEIGH	NO CAR ST	MATH	2
	ROSENBERG HARRY M	909 SOUTH STREET	GASTONIA	BRANDEIS U	SOSC	2
	SIMPSON CLIFFORD C	606 E WILSON STREET	FARMVILLE	YALE U	CHEM	2
	SINGLETON RICHARD M	114 DANIELS RD	CHAPEL HILL	U NOR CAR	PSYC	1
	SPIEGEL DOUGLAS K	P O BOX 547	CHAPEL HILL	U NOR CAR	PSYC	3
	TART CHARLES T	138 KING STREET	HAYESVILLE	U NOR CAR	PSYC	2
	WALKER GRAYSON H		DURHAM	DUKE U	MATH	1
	WELCH BRUCE L	BOTONY DEPT DUKE UNIV	DURHAM	U WASH	BIOL	2
	WILLIAMSON STANLEY M	1522 BILTMORE DRIVE	CHARLOTTE 7	DUKE U	CHEM	3
	YOUNG WARREN H JR		BURGAW	DUKE U	ENGR	1
	YOUNG WILLIAM L III	135 DANIELS ROAD	CHAPEL HILL	U NOR CAR	CHEM	1

N D	DECKERT WAYNE A	110 AVE	ARENA	NO DAK STC	ZOOL	1
	FURNESS BRUCE W	1107 14TH AVE SO	BISMARCK	JAMESTOWN	MATH	1
	HANSON ROBERT D	207 2ND STREET	GRAND FORKS	U MINN	ENGR	2
	JOHNSON BERNARD R		RIVERDALE	U ILLINOIS	PHYS	2
	MIDGARDEN DORIS J		HOOPLE	IOWA ST C	BCHM	1
	ROSENTHAL HASKELL P	909 15TH STREET SO	FARGO	MIT	MATH	1
	TILLY LAURENCE J	1422 11TH ST S E	JAMESTOWN	STANFORD U	ZOOL	2
	WILLIAMSON FREDERICK	306 WEST BROADWAY	WILLISTON	NO DAK AG	CHEM	2
	WULP DAVID G	BOX 215	MAYVILLE	CARLETON C	PSYC	1

OHIO	BARKO JAMES M	3324 W 61 STREET	CLEVELAND 2	ST VINCENT	MATH	1
	BARNES DONALD G	1830 CHESTNUT BLVD	CUYAHOGA FALLS	C WOOSTER	CHEM	1

*Out of alphabetical order

KOTZ JOHN C	BOX 343	GAMBIER	CORNELL U	CHEM	2
KUCHAR NORMAN R	ORCHARD LANE	MENTOR	CASE INST	ENGR	2
KULINSKI EDMUND S	3910 STRANDHILL RD	CLEVELAND 28	CASE INST	ENGR	2
LANDGRAF JEAN C	4746 GUERLEY RD	CINCINNATI 38	C MT ST JO	BCHM	1
LAWSOON JAMES R	MAYFIELD ROAD	GAYES MILLS	U NOTRE D	PHYS	1
LEIBNGOOD JEAN R	P O BOX 248	BLOOMVILLE	HEIDLBURG C	MATH	1
LENGEL PATRICIA A	36712 CENTER RIDGE RD	N RIDGEVILLE	OHIO ST U	BOTA	2
LINDBERG DAVID C	1802 CLEVELAND AVE NW	CANTON 9	NO WESTERN	SOSC	2
MARCHAND ALAN P	4158 WYNCOTE RD	SO EUCLID 21	CASE INST	CHEM	1
MARGRAVE THOMAS E JR	3342 EAST MARKET	WARREN	U NOTRE D	ENGR	1
MASSOUBH MICHAEL	408 11TH ST N E	CANTON 4	HIRAM C	MATH	1
MEANS DONALD R	370 MISSION DRIVE	AKRON 19	U AKRON	ENGR	1
MEARS DAVID E	404 HARRISON AVE	HARRISON	CARN TECH	ENGR	1
MITCHELL JAMES C	16 N NAVARRE AVENUE	YOUNGSTOWN 9	OHIO ST U	PSYC	3
MOLLS FRANK B	7810 RIDGEFIELD RD	CLEVELAND 29	KENT ST U	MATH	1
MORENO CARLOS W	10900 EUCLID AVE	CLEVELAND 6	CASE INST	ENGR	1
MUENTER JOHN S	349 SYCAMORE ST	TIFFIN	CASE INST	CHEM	2
MULLER OLAF	13913 ORINOCO	E CLEVELAND 12	STANFORD U	EART	2
NAYLOR WILLIAM C	3241 JEFFERSON AVE	CINCINNATI 20	WESTERN RES	PHYS	2
PARKER WILLIAM T	169 HOLLYWOOD AVENUE	AKRON 13	U NOTRE D	ENGR	1
PEERY CLIFFORD Y	211 W TENTH AVENUE	COLUMBUS 1	OHIO ST U	CHEM	2
PEREIRA CARLOS M	1373 E BLVD APT 3	CLEVELAND 6	WESTRN RES	PHYS	1
PRETTYMAN CLINTON E	1446 ROCKAWAY STREET	AKRON 7	U AKRON	PHYS	1
RICHARDS WALTER B	R D 4 BOX 11	CORTLAND	OBERLIN C	PHYS	1
SAVAGE JAMES P JR	232 N HEIGHTS	YOUNGSTOWN	CORNELL U	SOSC	2
SCHOENBERG ANDREW A	12526 ARLINGTON	CLEVELAND 8	CASE INST	ENGR	1
SKINN CHARLES W	14 PARK AVE	NORWALK	OHIO ST U	ENGR	1
SLONE HASEL J JR	ROUTE 1	WAVERLY	OHIO ST U	PHYS	2
SMITH MARGARET J	114 D WESTGAY DRIVE	AKRON 13	U AKRON	PSYC	2
SNEIDER THOMAS W	313 RAWSON AVENUE	FREMONT	U DETROIT	PHSL	1
SPAIN HARRY E JR	948 HUDSON ROAD	KENT	KENYON C	MATH	1
SUTHERS RODERICK A	129 GRISWOLD STREET	DELAWARE	HARVARD U	ZOOL	1
SWANDER JAMES E	143 WILSON STREET	STRUTHERS	EARLHAM C	PHYS	1
SWARTZ KARL D	1376 WEST 112 ST	CLEVELAND 2	CASE INST	PHYS	2
VOEGE HERBERT W	1013 BROADHOOR DR	DAYTON 19	OHIO ST U	SOSC	2
WARREN JOHN C	625 W CIRCLE DRIVE	FINDLAY	OHIO WESL	PHYS	1

STATE	NAME	ADDRESS	INST	FIELD
OHIO	WILLBERG CALVIN G	1005 SKINNER AVENUE	U WASH	EART 2
	WINTERS DAVID J	PARMLY ROAD	ANTIOCH C	MATH 1
	WINTERS EARL D	270 JACKSON PIKE	MIT	CHEM 2
	WUCHTER RICHARD B	364 SHARP AVENUE	CORNELL U	CHEM 2
	YOLLES ROBERT S	257 E MELFORD AVENUE	U DAYTON	CHEM 1
OKLA	BLADE RICHARD A	1600 OSAGE	U COLORADO	PHYS 2
	CAPEHART ROBERT J	1808 N STONEWALL	CENT OKLA	BCHM 1
	CLARKE ROBERT T	NIEMANN APTS B 11	U OKLAHOMA	EART 1
	DAMON EDWARD G	1112 N HESTER STREET	OKLA ST U	BOTA 2
	DORMAN CHARLES F	203 UNIV BLVD	U OKLAHOMA	PHYS 2
	FIKE JOHN L JR	501 NO SIXTH STREET	OKLA ST U	ENGR 1
	GILES ALBERT H	819 W EUFAULA	U OKLAHOMA	EART 2
	GILLET BILLY E	424 EAST WASHINGTON	OKLA ST U	MATH 1
	JEFFREY JOHN R	2041 DEWEY	SWISS FED	CHEM 2
	KING JOHN P	407 WEST THIRD ST	CENT OKLA	PHYS 1
	MAPES WILLIAM H III	3127 NORTHWEST 17	CARN TECH	CHEM 1
	MCKINNEY HENRY L	3345 N W 22	CORNELL U	SOSC 2
	NORTHROP LULLA	1804 N W 16TH ST	OKLA ST U	BIOL 2
	PAXTON GRADY W JR	607 DOVER DRIVE	U OKLAHOMA	PHYS 2
	ROPER LEON D		MIT	PHYS 2
	SHELTON BILL L	1114 NORTH GARY	OKLA ST U	PHYS 2
	WASTENEYS RICHARD A	BOX 2536	U OKLAHOMA	ZOOL 1
	WHITENTON BOBBY K	220 LINCOLN STREET	DUKE U	EART 2
	WIKOFF RICHARD L	6721 NORTHWEST 28TH	OKLAHOMA	BCHM 1
	WILLIAMS CHARLES R	5627 SO YORKTOWN PL	OKLA ST U	PSYC 1
	WILLIAMS WILLIAM L	1220 SO 12TH	TULSA	CHEM 2
	WOOD JOHN H	411 EAST MAIN	DARTMOUTH	PHYS 2
			AMERICAN U	MATH 1
OREG	BRESHEARS W DALE	1415 N E WEBSTER ST	PORTLAND ST	CHEM 1
	COFFEY RONALD G	2712 COOLIDGE DR	OREGON ST	BCHM 2
	DONOHUE DONALD J	1643 AGATE	U OREGON	MATH 3

OREG	FOGDALL LAWRENCE B	2943 S W LAKEVIEW	LAKE OSWEGO	LEWISCLARK	PHYS	1
	FRITSCH FREDERICK N	3927 N E HOYT ST	PORTLAND 12	OREGON ST	MATH	1
	GRANTEER DAVID L	1978 N W MARSHALL	PORTLAND 9	PORTLAND ST	PHYS	1
	HAGUE DONALD R	1353 BEECH	EUGENE	U OREGON	BOTA	2
	HENDRICKSON WILLIAM	1020 NO 32ND STREET	CORVALLIS	OREGON ST	ZOOL	2
	HIBBS BARBARA J	3848 S E TAGGART ST	PORTLAND 2	YALE U	ZOOL	2
	KYLSTRA CHESTER D	STAR ROUTE	FOSSIL	U FLORIDA	ENGR	2
	OJALA GARY L	1233 N E WYGANT ST	PORTLAND 11	PORTLAND ST	EARTH	1
	OSGOOD EDWIN B	2157 N E 28 AVE	PORTLAND 12	REED C	PHYS	1
	PROTHERO WILLIAM A	935 S W STEPHENSON CT	PORTLAND 19	PORTLAND ST	PHYS	1
	RADER ROBERT K	206 N E 41ST AVENUE	PORTLAND 12	STANFORD U	SOSC	1
	RASMUSSEN DEANNE	1959 JEFFERSON STREET	EUGENE	U OREGON	ANTH	1
	ROMO WILLIAM J	1219 14TH STREET	OREGON CITY	U OREGON	PHYS	2
	SHORACK GALEN R	2550 HARRIS	EUGENE	U OREGON	MATH	2
	SMITH CURTISS A	1010 HORN LANE	EUGENE	U OREGON	PHYS	1
	WULLSTEIN LEROY H	BOX 163B S43	CORVALLIS RT 2	OREGON ST	MCBI	2

PA	BEAN SALLY E	4810 VANKIRK STREET	PHILADELPHIA24	CHESNUT H	MCBI	1
	BENZINGER WILLIAM D	1032 WILLOW DR	PITTSBURGH 37	U NOTRE D	CHEM	1
	BERTA MICHAEL A	420 ARGONNE DR	N KENSINGTON	ALLEGHENY	CHEM	1
	BINSTOCK JUDITH	5404 AYLESBORO AVE	PITTSBURGH 17	CARN TECH	PHYS	1
	BRENNAN JAMES F	105 MEADOWBROOK AVE	CLARKS SUMMIT	U SCRANTON	CHEM	1
	BURNS MARGARET S	417 WALNUT ST	SHARPSVILLE	ALLEGHENY	BCHM	1
	CANFIELD PATRICIA A	259 PIKE STREET	PORT CARBON	IMMACULATA	CHEM	1
	CARTER RICHARD P JR	201 BRIARWOOD DR	PITTSBURGH 35	CARN TECH	CHEM	2
	COLEBOB CAROLE J	315 ELSDON STREET	PITTSBURGH 14	U CAL BERK	MATH	3
	CREWDSON RICHARD C	402 CATTELL STREET	EASTON	LAFAYETTE	ENGR	1
	DELCASALE IRENE S	467 SOUTHCROFT ROAD	SPRINGFIELD	IMMACULATA	CHEM	1
	DIXON WILLIAM T JR	524 GAINESBORO RD	DREXEL HILL	CORNELL U	PHYS	1
	DOUMAUX ARTHUR R	29 GRANT STREET	WELLSBORO	LEHIGH U	CHEM	1
	DRESDEN MARC H	KIRKLANE & THIRD ST	MEDIA	HARVARD U	BPHY	2
	ECKROTH DAVID R	115 CENTER SQUARE	ORWIGSBURG	F AND M C	CHEM	1
	EVANS DAVID H	1 BAYARD ROAD	PITTSBURGH 13	HARVARD U	CHEM	1
	FANELLI ROBERT V	8 STACY DRIVE	YARDLEY	STEVENS IN	PHYS	2

TENN	BERTRAND BOBBY J	115 PINE STREET	PULASKI	U SOUTH	MATH	1
	COOK EARL L	1020 NORMAL AVE	CHATTANOOGA 5	ALA POLY I	PHYS	1
	CRAVEN CLYDE W JR	107 MARYVILLE CR	OAK RIDGE	U TENN	ENGR	1
	FLOYD FRANKLIN W JR	176 5TH ST N W	ATLANTA	GA TECH	ENGR	1
	GILLILAND JOHN W JR	ROUTE 2	HARRIMAN	VANDERBILT	PHYS	2
	HALL ELEANOR L	7072 EIGHTH ROAD	MEMPHIS 8	SO WESTERN	BCHM	1
	KIMBROUGH EMORY	410 GREENWOOD AVENUE	CLARKSVILLE	U NOR CAR	SOSC	3
	LINER ROBERT T JR	416 OSBORNE DR	CHATTANOOGA	U TENN	ENGR	1
	PAYNE JERRY A	120 WADE LANE	OAK RIDGE	U TENN	ZOOL	1
	RAY DAN S	4407 QUINCE ROAD	MEMPHIS 17	WESTERN RES	BPHY	2
	SEYFERT CARL K JR	ROUTE 2	BRENTWOOD	STANFORD U	EART	2
	SOSSONG NORMAN D	P O BOX 184	MADISON	WALLAWALLA	PHYS	2
	SWITZER ROBERT M JR	1620 FAIRIDGE PLACE	KINGSPORT	HARVARD U	MATH	1
	THOMPSON BARRY H	100 OAKSLEA PLACE	JACKSON	U SOUTH	GENE	1
	VANAMAN SHERMAN B	504 E ANDR JOHNSON HY	JEFFERSON CITY	U TENN	MATH	3
	WARD JAMES E III	1619 18TH AVE SO	NASHVILLE	VANDERBILT	MATH	1

TEX	ALLDREDGE GERALD P	P O BOX 447	DIMMITT	MICH ST U	PHYS	2
	ALMY CHARLES C JR	1123 BARTLETT APT 3	HOUSTON 6	RICE INST	EART	2
	ARMSTRONG ANDREW T	2300 6TH AVE	CANYON	NO TEX ST	CHEM	2
	BECTON ABNER J	BOX 165	PETERSBURG	IOWA ST C	ZOOL	2
	BOEHME HOLLIS C	BOX 95	MABANK	A M TEXAS	PHYS	2
	BRENNAN MARGARET A	5535 BONITA	DALLAS 6	U DALLAS	MATH	1
	BYNUM WILLIAM L	4201 KEETER DR	FORT WORTH 18	TEX CHR U	MATH	1
	COLE STEPHEN N	6108 DELOACHE	DALLAS 25	HARVARD U	MATH	2
	CRIDER JOHN E	8216 GRAFTON ST	HOUSTON 17	RICE INST	ENGR	1
	DAUGHERTY FRANKLIN W	1901 NORTHRIDGE DRIVE	AUSTIN 2	U TEXAS	EART	3
	ELSIK WILLIAM C	ROUTE 2	CALDWELL	A M TEXAS	MATH	2
	FALBO CLEMENT E	1310F BRACKENRDGE APT	AUSTIN 3	U TEXAS	MATH	2
	FISHER GARY D	P O BOX 765	BORGER	JOHNS HOPK	ENGR	2
	FITZUGH HENRY A	ROUTE 9 BOX 226	SAN ANTONIO	A M TEXAS	AGRI	2
	FOREMAN MAXINE F	3817 33RD ST	LUBBOCK	U COLORADO	BOTA	2
	FRENCH SAMUEL E JR	1712 PRINCETON	MIDLAND	OKLA ST U	ENGR	2
	GARRETT BARRY B	2003 SABINE	AUSTIN 5	U TEXAS	CHEM	2

STATE	NAME	ADDRESS	INST	FIELD
TEX	GOLDSBERRY TOMMY G	ROUTE 1 BOX 12	JACKSONVILLE	MATH 2
	HARRIS HUGH K	3912 CLAYTON RD EAST	FORT WORTH 16	PHYS 2
	HINCKLEY CONRAD C	4541 ROLAND	DALLAS	CHEM 2
	KLEIN JEROME	803 OAK	BRYAN	CHEM 2
	KNIGHT WILLIAM J	12 3 W ANGLIN	UVALDE	AGRI 2
	LOCKERD ROBERT M	1134 MEANDER ST	ABILENE	MATH 2
	LOUDON CHARLES E	102 OXFORD DRIVE	SAN ANTONIO 1	ENGR 1
	MATTOX KARL R	3814 B RIDGELEA DR	AUSTIN 3	PSYC 1
	MCDADE PATRICIA J	1413 WEST BEDDELL ST	TEXAS CITY	PSYC 1
	MULLER LINDA L	807 10TH AVENUE NO	TEXAS CITY	PHYS 2
	MURTIZDEMONTTELLANO B	303 BRYN MAWR DRIVE	SAN ANTONIO 9	CHEM 2
	PRATT ROY E	4631 CLERMONT AVE	GROVES	CHEM 1
	REEVES LINDA R	6933 WOODHILL ROAD	DALLAS 17	ENGR 1
	SILER WALTER L	4400 AVE F	AUSTIN 5	CHEM 1
	SMITH LEE H	2639 W TENTH	DALLAS 11	EART 2
	SPENCER ALEXANDER B	621 CANTERBURY HILL	SAN ANTONIO 9	MATH 2
	VUILLEMIN JOSEPH J	1920 MITCHELL	WACO	EART 2
	WEHMANEN OSCAR A	6324 DARWOOD	FT WORTH 16	PHYS 2
	WILLCOTT MARK R	BOX 293	SAN JUAN	MATH 1
	WOLFSKILL LYLE A	4216 DARTMOUTH	HOUSTON 5	CHEM 3
				ENGR 2
UTAH	BRADSHAW JERALD S	342 SO 7TH W	CEDAR CITY	CHEM 3
	BUSS WARREN R	2820 LIBERTY AVE	OGDEN	BOTA 1
	CANNON JOHN P	173 E 3 N	LOGAN	ENGR 1
	CAREY THOMAS A	418 BETA 11	SALT LAKE CITY	MTRL 1
	DAVIES THOMAS L	870 N 6 W	PROVO	PSYC 2
	JAMES LYNN F	442 EAST 9TH NO	LOGAN	BIOL 2
	MANGELSON NOLAN F	490 EAST 1ST NO	EPHRAIM	BIOL 2
	MCCARTY FARIS G	5756 BUTLER CIRCLE	MURRAY 7	CHEM 2
	NICHOLS KARL R K	340 E 2ND NORTH	PROVO	CHEM 2
	ODGEN PHIL R	569 SO 700 WEST	CEDAR CITY	PHSL 1
	SORENSEN WILLIAM K	382 E MAIN	HYRUM	PHSL 2
	SWADE RICHARD H	W F COLLETT 69 S 4 E	KAYSVILLE	ZOOL 2
				BIOL 3

WISC	BENEDICT GERALD P	5673 NO 91ST ST	MILWAUKEE 18	MILWKE ENG	1
	BIELEFELD MICHAEL J	3109 N LAKE DR	MILWAUKEE 11	SPRNG HILL	1
	BROCKINGTON DONALD L	APT 605J EAGLE HGTS	MADISON 5	U WISC	1
	CEJKA JEANNE A	3057 N CRAMER STREET	MILWAUKEE 11	U WISC	1
	CHASE GERALD R	225 ROGERS STREET	MILTON	BELOIT C	1
	CHEEK FRANKLIN D II	3742 N 23RD STREET	MILWAUKEE 6	U WISC	1
	CHERNEY CLAUDIA A	2804 N 98 STREET	MILWAUKEE 10	MT MARY C	1
	CRUMP M DOMINIQUE	1501 S LAYTON BLVD	MILWAUKEE 15	MILVERNO C	1
	FORTNEY DAVID J	R 5	VIROGUA	ST OLAF C	1
	GEISER JOSEPH B	4213 N LARKIN STREET	MILWAUKEE 11	BROWN U	3
	GROTA LEE J	906 MEMORIAL DR	THORP	PURDUE U	1
	GUELL DAVID L	P O BOX 84	SHAWANO	NO WESTERN	2
	GUETHS JAMES E	BOX 188 R 2	WAUPACA	RIPON C	1
	HAEBIG JON E	404 S DIVISION STREET	LA CROSSE	U CHICAGO	1
	HARTLEY THOMAS G	2121 VALLEY RD	MADISON 5	ST U IOWA	3
	HELGESON JOHN P	508A EAGLE HGTS APTS	MADISON 5	U WISC	2
	HURLEY RICHARD T	1802 MISSISSIPPI ST	LACROSSE	U NOTRE D	2
	JACOBSEN JERROLD J	3014 S 41 STREET	MILWAUKEE 15	MARQUETTE	1
	JUDD JOHN H	236 S JAMES ST	KIMBERLY	WISC ST C	1
	KULCINSKI GERALD L	619 WEST BRIDGE ST	CEDARBURG	U WISC	1
	LAWTON RICHARD G	505 D EAGLE HGTS	MADISON 5	U WISC	3
	MARSH ANN E	C/O OLSEN NAT BANK	WAUPUN	SWISS FED	1
	MOORE ROBERT S	1251 RUTLEDGE STREET	MADISON	U WISC	3
	MORIN DORIS C JR	2924 HARVEY ST	MADISON 5	U WISC	3
	NEUMAN MELVIN A	2249 S 17TH STREET	MILWAUKEE 15	U WISC	2
	NIELSEN ROBERT M	707 MANISTIQUE AVE	SO MILWAUKEE	U WISC	1
	PETERS TILL J	12 SHERMAN TERRACE	MADISON 4	U WISC	1
	PFEIFFER LOREN N	1116 MOTOR AVE	WAUKESHA	U MICHIGAN	1
	PONTRELLI GENE J	347 WEST DOTY STREET	MADISON 3	U WISC	3
	POPE DAVID P	2305 NORTHVIEW RD	WAUKESHA	U WISC	1
	RAICH JOHN C	4024 W EUCLID AVE	MILWAUKEE 15	IOWA ST C	2
	READ DOROTHY L	1411 CARLISLE AVE	RACINE	ANTIOCH C	1
	ROBINSON JAMES H	200 E SUSAN DRIVE	SO MILWAUKEE	U WISC	1
	SOREF RICHARD A	1520 E HAMPTON	MILWAUKEE 17	STANFORD U	3
	SOULEN THOMAS K	603 E EAGLE HGTS APTS	MADISON 5	U WISC	3
	STELLRECHT DAVID E	RT 1 BOX 65	SPOONER	MICH ST U	1



<u>STATE</u>	<u>NAME</u>	<u>ADDRESS</u>	<u>INST</u>	<u>FIELD</u>
WISC	STOLHAMMER DONALD E	ROUTE 1 BOX 139	BETHEL C S	CHEM 1
	STRANGE WILLIAM E JR	5802 RUSSETT RD	U WISC	EART 3
	SWORSKE MARY A	4572 N 40 STREET	MT MARY C	MATH 1
	UNDERBRINK CHARLES D	242 W MADISON ST	U WISC	CHEM 1
	WENDTE JAMES C	214 RICHLAND LANE	U WISC	PHYS 2
WYO	GOFF JAMES R	1311 BIG HORN AVENUE	NEB WSLY U	PHYS 1
	MATERI DONALD J	WORLAND UPTON	U WYOMING	ENGR 1

The CHAIRMAN. The Chair would like to recognize some of the other members of the committee here. You have been going 20 minutes now.

Mr. FULTON. I am practically through. I think this basis of decision needs to be technically laid at this point so that I am taking care to do it. The other members will help me. It has been my job as corporate counsel in many matters to do such work.

Now, who in the National Science Foundation is the report made to by the panel and then who has the responsibility for decision? What are their titles?

Dr. WATERMAN. It comes, of course, officially from the Academy to the Director and then is referred to the Assistant Director of the National Science Foundation for Scientific Personnel and Education. It is then referred to the Fellowship Section of which Dr. Fontaine has charge.

Mr. FULTON. Well, who has responsibility then in a case like the Yellin case?

Dr. WATERMAN. Dr. Fontaine makes the recommendation to his superior and he, in turn, refers this to me and I refer it to the National Science Board or take final action under a delegation of authority.

Mr. FULTON. Who is his superior?

Dr. WATERMAN. Dr. Bowen Dees, Assistant Director of the National Science Foundation for Scientific Personnel and Education.

Mr. FULTON. Does he make the decision?

Dr. WATERMAN. He recommends it to me.

Mr. FULTON. Is that referred to you?

Dr. WATERMAN. He refers the matter to me and then I act on delegation of authority from the National Science Board or recommend to the Board.

Mr. FULTON. In the Yellin case did you act on delegation of authority or did you recommend to the Board?

Dr. WATERMAN. I acted. The Board has delegated me authority to act on these fellowships.

Mr. FULTON. So that in that Yellin case, you were the one who made the decision.

Dr. WATERMAN. That is right.

Mr. FULTON. On recommendation by two people in your shop?

Dr. WATERMAN. Yes.

Mr. FULTON. And they had the benefit of a report by the panel.

Dr. WATERMAN. Yes; and these fellowship recommendations are reviewed just before they reach me, by Dr. Harry Kelly, Associate Director of the Foundation.

Mr. FULTON. Could you put in the record what gives these subordinates of yours this authority, what instructions do they have for making investigation prior to their decision? How do you know that they have made any investigation?

Dr. WATERMAN. Because that is their job. Their instructions are to carry out the study of the recommendations from the panel and the Academy and make recommendations through their superiors to me.

Mr. FULTON. At the point of decision you actually sign—

Dr. WATERMAN. Excuse me, they don't actually make an investigation. They just study the record.

Mr. FULTON. So that within the National Science Foundation then there is no investigative body and no duty of any one of the officers

or employees paid by the National Science Foundation to investigate?

Dr. WATERMAN. No.

Mr. FULTON. They then take the report from the panel and evaluate it?

Dr. WATERMAN. That is correct.

Mr. FULTON. And then they give it to you with a recommendation not only on this, but other applicants in this particular group.

Dr. WATERMAN. On the basis of the evidence that they have, yes.

Mr. FULTON. Now, who evaluates what kind of programs you will go into, that is the decision on the type of research and development or grant you will give, where is that done?

Dr. WATERMAN. This starts, of course, with the National Science Board in consultation with me and we together determine what programs the Foundation will undertake and then my job is to carry them out.

The CHAIRMAN. Now is the gentleman about through?

Mr. FULTON. Yes, but your two assistants don't have any duty in looking into what slots shall be provided for applicants to fit into, do they?

Dr. WATERMAN. I don't understand your question.

Mr. FULTON. Your two assistants, the people in the National Science Foundation who recommend to you have no supervision about slots, do they, that the applicants would fit into? They are not choosing the type of work to be done?

Dr. WATERMAN. No, that is laid out for them. They assign the candidates in the available programs.

The CHAIRMAN. Now, Doctor, may I suggest this: Yesterday we had some reference to the law placed in the record. I don't believe the entire section 10 of Public Law 507 was placed in the record. If it wasn't, I think it should be at this point.

Dr. WATERMAN. All right, sir.

The CHAIRMAN. And may I say this, too: You have given me the National Science Foundation graduates fellowship invitation and there on page 1 is a paragraph entitled "Eligibility."

I think that paragraph ought to be in the record. Since it is short, I will read it:

Eligibility: National Science Foundation graduate fellowships will be awarded on a basis of ability, to persons who are citizens or nationals of the United States as of March 1, 1961, and who have demonstrated ability and specific aptitude for advanced training in sciences. Awards will be made to individuals studying for either masters or doctoral degrees under one of the following levels, and then the levels are first year fellowship, intermediate fellowships, terminal year fellowships.

Those are the regulations under which you proceeded, are they?

Dr. WATERMAN. Yes, sir. I think it would be helpful to add to the record the next page, the section headed "Selection," and the one following that, "Conditions of Appointment." Would you like me to read those, Mr. Chairman?

The CHAIRMAN. Yes, please, sir.

Dr. WATERMAN (reading):

SELECTION

Selection of fellows will be based on academic records, recommendations regarding each applicant's ability, scores achieved in examinations designed to test scientific aptitude and achievement and other evidence of potential scholar-

ship. Instructions concerning these examinations are contained in the application materials. The applicants must make the necessary arrangements by January 6, 1961. Evaluation of each applicant's qualifications will be made by panels of scientists appointed by the National Academy of Sciences-National Research Council which assists the National Science Foundation in the evaluation of applicants.

Final selection of fellows will be made by the National Science Foundation. All applicants will be notified by letter of the disposition of their applications on March 15, 1961. An honorable mention list containing the names of applicants for graduate fellowships considered worthy of support, but to whom awards could not be made, will also be distributed on that day.

The next section is headed :

CONDITIONS OF APPOINTMENT

Applicants must submit an application form, complete copies of transcripts of their college and university records, and the plan of study for advanced training or research. The affidavit and loyalty oath required by section 16(d) of the National Science Foundation Act of 1950 as amended, 42 U.S.C. 1874(d), must constitute part of the application.

The CHAIRMAN. In addition to that under section 11(a) the law permits the Foundation to prescribe rules and regulations for the handling of its affairs, is that correct?

Dr. WATERMAN. Yes, sir.

The CHAIRMAN. Now did you construe that subsection to apply to cases of this sort?

Dr. WATERMAN. We construed it to apply to the procedures and operations by which we made the awards.

The CHAIRMAN. So that you did have certain authority to make some regulations at any rate.

Dr. WATERMAN. Yes, of course, we would have to, because there are procedures necessary such as the announcement and collection of materials and the manner of evaluation and the manner in which we handle the selection of the candidates in the National Science Foundation.

The CHAIRMAN. But you construed the authority under the law not to give you the authority to put restrictions other than the ones that you have indicated on the admission of candidates.

Dr. WATERMAN. I would think we would have to abide by the law as it stands. We could not alter that.

The CHAIRMAN. The law provides that you make regulations.

Dr. WATERMAN. This is to carry out the law, but we don't feel that we could modify the law.

Mr. FULTON. But if you construe the law that strictly, the killers of Bobby Franks could then qualify because they certainly had outstanding scientific ability and genius intelligence.

If you don't put any expression in the law—

Dr. WATERMAN. I doubt if those who knew those people would recommend them.

Mr. FULTON. I think the chairman has a point.

The CHAIRMAN. Does your attorney take that view, that you can't make any restrictions?

Dr. WATERMAN. Mr. Hoff.

Mr. HOFF. I think that the whole question of what solely on the basis of ability means, is what reasonable people who are in a position to judge what goes into scientific ability feel goes into it. In this case by statute, that group is the National Science Board.

Personally I think one of the problems here is right in this area. If we begin to take up the question of whether the slayers of Bobby Franks could get a fellowship, we would have to go right through the Criminal Code and decide not only which crimes involve a reflection on scientific ability through character failure, but also perhaps even the motives for which the crime was done or the circumstances and so forth.

I don't think an agency like the National Science Foundation can make such determinations. It doesn't have the facilities available to determine facts that are open to a court or even to a regulatory agency and it would simply result in my opinion, in arbitrary decisions which I think would be quite repugnant.

The CHAIRMAN. You would mean then by what you say that no questions of moral turpitude or character or past record other than academic record, would be considered, is that right?

Mr. HOFF. No, sir. We do get information on the question of the exact—well, it relates to maturity and stability. Under "applicants' characteristics," on which we get ratings, well, I will read all of them: His self-reliance and independence in scientific work, his motivation toward a successful productive scientific career, his emotional stability and maturity.

The CHAIRMAN. Wouldn't that bring this thing into question?

Mr. HOFF. I would think that this is where the opinion of those who know him best should be tempered by his whole record, certainly by his criminal record. They can't help considering that, it seems to me, if they know it in reaching—

The CHAIRMAN. Well, now in this particular case would you say that this would have applied to this case had it been properly considered?

Mr. HOFF. Well, I hesitate to pass judgment on people who gave references in a case like this.

The CHAIRMAN. No, I am asking you as an attorney, you are the chief attorney. Tell us what you think that would require.

Mr. HOFF. I don't know, Mr. Yellin, but I would assume that anyone giving a reference who knew the facts would take them into consideration in determining his emotional stability and for that matter, his maturity.

The CHAIRMAN. So under your present authority you could have considered that.

Mr. HOFF. I think the reference people could have considered it and if the National Science Board felt that a conviction under the circumstances relating to Mr. Yellin affected his ability through affecting his emotional stability, it could have been considered, but I can't make that decision. I think that is—

The CHAIRMAN. And, too, where you use the term "special aptitude," wouldn't that also bring into question his moral stability and his legal violation of the law?

Mr. HOFF. I am sorry, under eligibility?

The CHAIRMAN. In your invitation for applications you use the term "special aptitude."

Mr. HOFF. Well, I think under special aptitude if he has a character defect which would take away from the possibility of his pursuing a successful career as a scientist that could certainly be taken into account by anyone evaluating him.

The CHAIRMAN. Would you call the sort of thing we have in the Yellin case character defect?

Mr. HOFF. I don't know. I think this is a difficult thing to judge on papers. I think you would have to talk to the man, see how he looks at things now, whether these things are a thing of the past or what motivated him.

I doubt whether it is possible short of a judicial proceeding to determine these things.

The CHAIRMAN. You are bringing into question your ability to pass judgment on any of them then.

Mr. HOFF. I question the ability to pass judgment in many cases on whether the conviction for a misdemeanor or another crime affects someone's ability. I think this is the core of the problem. I think if this is going to be handled in this way, it probably would have to be done with a broad brush of having a presumption in the law that conviction for certain crimes just counts against you, period, and not leave it up to the Foundation to decide whether candidate A has a pure heart, although he spent some time in jail and candidate B doesn't.

The CHAIRMAN. What I understand you are driving at then is you would rather for Congress to write into the law that anybody guilty of a crime involving penal servitude, we would say, would not be eligible, just in so many words.

Mr. HOFF. Well, Mr. Brooks, over the years I have given a great deal of consideration to what would be a better provision than is presently in the law and obviously there are various possibilities. I have no recommendation, but I would say that I think the original proposal of investigations would be the wrong one. I think Congress was very wise in throwing that out.

The CHAIRMAN. Well, if I may say this, judging by the experience that we have had with NASA, too, they have people on the payroll for several years without being able to clear them, it would indicate that an investigation might be too slow.

Mr. HOFF. Well, not only would it be slow, but it would pose, I think, impossible imponderables to an administrative body not equipped to get the facts. If I had to suggest something, I would say that consideration might be given to the type of statute which passed the Senate, I believe, last year, but not the House. I think it got lost in the shuffle at the end, in connection with the NDEA Act, where knowing membership in the Communist Party was made—I am quoting from S. 2929 of the last Congress, last session:

No person may apply for or receive any grant, payment, or loan under this act while he is a member of the Communist Party or any other organization having for one of its purposes or objectives the seizure or overthrow of the Government of the United States or the government of any State or political subdivision thereof, by the use of force or violence and has knowledge of such purpose or objective of that party or other organization.

And then it goes on to other things. This is just to give you the type and it has a penalty. Now, this type of statute—

The CHAIRMAN. Well, that, of course, wouldn't quite cover this case. This is a case of conviction.

Mr. HOFF. But I am not finished. What I was talking about was the type of statute. Now, here Congress could consider what types of conviction could be added to this type of thing of knowingly be-

longing to the Communist Party and could go further and say that convictions for certain crimes—and I think it would have to be convictions, in my opinion, not allegations, because otherwise that gets you right back into the impossibility of sorting them out—then I would also think there ought to be some sort of exception so that if the National Science Board after knowing all of the facts, felt that the national interest would be served in a particular instance, notwithstanding the prior conviction for something, that they would have the authority to make the exception.

Now, this obviously can be changed around a bit so that the crime can apply to filing the application. Well, I think this does it. Right on the application they would be required to give this information or it would be a fraudulent application.

The CHAIRMAN. Like the requirement of the Civil Service Commission on its application for positions, you are required to divulge that.

Mr. HOFF. Yes.

The CHAIRMAN. I would think that we would require a candidate who is asking for funds to complete his education to divulge information regarding impediments or obstacles or reasons for refusing his application.

Mr. HOFF. I think the difficulty there is the question of specificity.

The CHAIRMAN. Well, that is a big word, but I take it that you mean he should specify.

Mr. HOFF. That is right, in other words, to merely say "Dear candidate, tell us everything you think should make us decide against you," would be a little too vague to get what you want, so that is why I think that this type of statute with a list of those particular things that are considered germane by Congress, would be something that could be given consideration.

The CHAIRMAN. Well, now you have been working on that, you have given it some thought. Do you have any suggestion in reference to amendment of the statute that you would like to submit to us?

Mr. HOFF. Well, I would like to say two things on that. One, this particular solution just occurred to me this morning so that I haven't been working on trying to put any flesh on the skeleton. Also, I think this is something that the Board would probably have some ideas on and I think the next step, if you think this idea has some merit, would be for us to explore it with the Board.

The CHAIRMAN. Well, I think that the committee should take reasonable time and give this thing thought. I don't think that we should be precipitate about our actions; but as a matter of fact, applicants for employment with the Government are required to certify as to character, reputation, and loyalty and we might approach it from that viewpoint; that an applicant for a fellowship—I understand that is not the same as a scholarship, it is an advanced scholarship where a man has reached maturity—why shouldn't he be required to submit something in the way of an application of the type that he would submit if he were seeking a job with the U.S. Government requiring a screening as to character, reputation, and loyalty.

Mr. HOFF. Well I feel there are great problems in trying to screen these things, because in the first place, we have 15,000 of these applications a year and such a procedure would hold things up until after

the next year had gone by probably on top of which you merely get information as distinct from facts, you get into an area where people can have different opinions and it really would be extremely difficult to administer and to arrive at any sensible conclusions without injuring a lot of fine people.

The CHAIRMAN. At the risk of interrupting, Mr. Corman tells me he has to go to another meeting. Well, he really ought to stay at this meeting because this is important but I recognize him at this time for some questions.

Mr. CORMAN. Thank you, sir. It seems to me that a question that some of us have been asking is whether or not we have the kind of security written into this statute which will prevent our giving awards to Communists. I think we have that and we have it in the most practical form we can get it.

If there is justification for loyalty oaths, this certainly is one of them. If this man is a Communist, I assume he will wind up in jail for perjury. Beyond that, there are some other things that I think should be considered in this field and I would think that the term "moral turpitude" is of sufficient specificity that it could be used in the statute. There is a rather specific body of law; for instance, you can't practice law if you have been convicted of a crime involving moral turpitude. I think that the crime can be defined and I think that it would be very simple to ascertain that fact just as you ascertain membership in the Communist Party.

You have the man sign an oath that he has never been convicted of a felony involving moral turpitude.

The CHAIRMAN. This is not a felony though, is it? In this instance, it is a misdemeanor because the penalty was a year.

Mr. FULTON. It was a year, but not a year and a day.

The CHAIRMAN. That is correct.

Mr. CORMAN. Well, there is, Mr. Chairman, the other theory and it is used in the military service, that you are convicted of a crime which may be a felony or for which the penalty may be more than a year.

Mr. HOFF. The maximum penalty in this case is 1 year.

Mr. CORMAN. You can decide whether you want to eliminate those convicted of a misdemeanor. But I think the statute is delinquent in that it doesn't even say those who are convicted of a felony are precluded.

You might get a murderer, for example. I am sure there are other crimes that concern us besides membership in the Communist Party. You would not want awards to go to these people, even though they may be brilliant. Whether it should be a felony or a misdemeanor should certainly be reviewed by this Board and the committee before the statute is changed. I must say in reviewing the statute, it seems to me as far as the Communist provision is concerned, we are approaching it in the most efficacious manner possible by requiring an oath or affirmation of nonmembership and then in the event of evidence to the contrary, submitting it for prosecution.

That should keep us clean in that respect.

Mr. CASEY. Will the gentleman yield?

Mr. CORMAN. Yes, sir.

The CHAIRMAN. Is the gentleman through?

Mr. CORMAN. I have to yield back to the chairman.

The CHAIRMAN. Let's proceed to recognize some of the other members of the committee.

Mr. FULTON. I am surprised that from the National Science Foundation point of view, sentence to a Federal penitentiary for a year for contempt of Congress is not prima facie evidence of instability.

The CHAIRMAN. Well, I don't know that it applies specifically to the National Science Foundation. It applies generally across the board. Mr. Karth.

Mr. KARTH. Mr. Chairman. Doctor, I understood you to say that you had received no letters from the University of Illinois or from any other source mentioning the July 31, 1958, hearing before the Un-American Activities Committee at which Mr. Yellin appeared, is that correct?

Dr. WATERMAN. That is correct, yes.

Mr. KARTH. I don't know whether we have yet established whether or not the National Science Foundation has ever refused to grant a fellowship for any reason other than ability, or should I say lack of ability.

Dr. WATERMAN. The only thing is the failure to execute the oath and affidavit. There have been refusals on that score.

Mr. KARTH. But only for those two reasons, in addition to ability.

Dr. WATERMAN. To the best of my knowledge, yes.

Mr. KARTH. In determining ability, however, the National Science Foundation does not have to give credence only to one's scholastic ability do they?

Dr. WATERMAN. This is ability with respect to carrying out the career that one wants to do in connection with his fellowship.

Mr. KARTH. So this involves a great many things in addition to scholastic aptitude.

Dr. WATERMAN. Intellectual ability, motivation, perseverance, and his integrity, too, as judged by his peers.

I do want to make a special point of that. Scientists are very scrupulous with respect to the man's integrity in his work. Science would fall to pieces if there were any weak element in the chain. When a man publishes certain research results, they must be trustworthy or he is through as a scientist. Anything he publishes is surveyed critically by his colleagues all over the world and if there is anything wrong with it, this is a black mark on his record as a scientist and if this happens more than once, he is practically through.

Now, the people in the case of these candidates for fellowships who write about the man have seen him at work and they judge these things very critically.

As things stand now, that is our best hold on ability, the knowledge of the people who have these ideals and have seen the man in action and judge whether he is worthy, all of these things considered. That is the only way we can get at it right now.

Mr. KARTH. Doctor, the reason I suggested that you answer these questions is that it seems to me some time ago in answer to one of Mr. Fulton's questions when he asked whether or not if the facts about Mr. Yellin had been known about him prior to the granting of the fellowship, would you, in your opinion under the law, still have been compelled to grant him the fellowship.

It seems to me that your answer was "Yes."

Dr. WATERMAN. Yes, but, of course, this would depend upon how this was regarded by the letters that dealt with it. If they said frankly, the man had been convicted of contempt, but they knew him and they felt that he had turned over a new leaf——

Mr. KARTH. Well, whether or not this information had been in any letters, let's say, that it was of personal knowledge to you, then because of the maturity and stability requirements involved in this in addition to scholastic ability, it seems to me that your answer probably should have been "No," instead of "Yes," or certainly could have been "No," instead of "Yes," under the law.

Dr. WATERMAN. Under the law, it would seem to me since we are judging by ability we would have to take the evidence in due course from the people who wrote the letters of recommendation. If they felt——

Mr. KARTH. In other words, you cannot use your own judgment insofar as your own knowledge about the person is concerned. You must accept only those recommendations that have been written by people who——

Dr. WATERMAN. I would think so as a practical matter, I would think we would have little recourse but to rely primarily on the words of those who know the applicant best except that additional information might give us a better view of his ability.

The CHAIRMAN. Would the gentleman yield?

Then, hadn't we better change the law and give you authority to reject applications?

Dr. WATERMAN. I think that is really the matter at issue, and, as I said earlier in my statement, I propose to bring this before the National Board for their careful deliberation and would appreciate any ideas that you gentlemen have before this happens.

Mr. KARTH. Mr. Chairman.

The CHAIRMAN. I recognize Mr. Karth.

Mr. FULTON. Before you leave that, may I suggest that Dr. Waterman consult with his counsel before he leaves those remarks on the record? I think you should advise him, because when the witness says he has no discretion, and he must rely solely on letters and the persons who recommend, I am sure he doesn't mean that.

Mr. HOFF. Well, instead of conferring, let me state my understanding of what Dr. Waterman was saying.

My understanding of what he said is that as a practical matter, meaning in order to relate the facts to ability, the only practical way that we know of going about that is to rely on the people who know the individual and not by judging on bare facts, and this comes back again to how a small administrative body in Washington, which has as one small part of its program 15,000 applications, can pass judgment, except as other people who know the facts, know the individual, and know his present outlook, and so forth, testify to it.

The CHAIRMAN. Well, now, is it correct that the Foundation does not have the authority, and does not use the authority, to act independently in accepting or rejecting these applications?

Mr. HOFF. No.

The CHAIRMAN. That is not correct, is it?

Mr. HOFF. No, that is not correct. We certainly have the authority to award the fellowships on the basis of ability.

The CHAIRMAN. As a matter of practice, what you are trying to say is you have so many applications you accept the recommendations without looking behind the recommendations?

Mr. HOFF. Well, no, I won't quite say that. If factors are there which seem very strong to us just as facts, and are of the type that you can really determine without going into a long hearing type of process, and getting firsthand information, then we could take them into account, but I stress again, as a practical matter, this comes down to the same—

The CHAIRMAN. Well, of course, when you have a conviction by a court, you don't have to worry about a long, drawn-out hearing on it. It shows on its face.

Mr. HOFF. This is a question of past conviction, too. Now, in this case it is before serving sentence, and so forth, and it is fairly recent, but this again comes down to a question of degree, and I think this is something the National Science Board can consider, whether this conviction can be construed to affect the applicant's ability. I don't know whether it affects his ability or not.

Mr. KARTH. Mr. Chairman.

The CHAIRMAN. Mr. Karth, you were recognized but we interrupted you.

Mr. KARTH. I will be finished in just a moment.

I might respectfully suggest to counsel that one's friends are normally interested in seeing that this individual would be granted a fellowship rather than giving you information that would jeopardize his chances for the fellowship. It would seem to me that in addition to accumulating information from personal friends of the candidate, that the Director and/or his associates at the Foundation, or the National Science Board, if they know of other facts that are pertinent to the point of whether or not this man should receive a fellowship, I think that these facts that are known to them but have not been cited by his friends, erroneously or otherwise, should be given great credence and consideration in determining whether or not this man is mature enough or stable enough to qualify him for a fellowship.

Now, let us just finish. It seems to me, too, that these fellowships are granted for the purpose of an individual pursuing his academic course, and I would doubt seriously, Doctor, that if this man was to be sentenced to jail for a year that he could pursue his academic course in jail, and so it seems to me that on this basis, also, within the present law, there is sufficient room for the Foundation to disapprove the grant.

Mr. HOFF. May I reply to the first part first?

The reference letters don't come from personal friends. They come from the professors with whom he has been working. He may or may not have made them professional friends. Certainly if we had had the information this would have been something that the National Science Foundation could have considered. This is what I tried to say before, they could have considered as to whether this affected his ability.

On the second—

The CHAIRMAN. Well, now, wait; are you telling us that if you had had the information you would not have approved this application?

Mr. HOFF. No, sir. This is something I can't say. What I say is the question of whether this conviction could be construed as affecting scientific ability in the opinion of scientists and scientific administrators who have the responsibility for determining policy for the National Science Foundation, is something that could have been taken into consideration.

I don't know whether I am getting my thought on that clear.

The CHAIRMAN. Well, if you had had all of this information you are still not of the opinion that you should have turned it down?

Mr. HOFF. I am of the opinion that the National Science Board could have considered as to whether this would affect their granting the fellowship or not. I can't go further than that, because we didn't have it, and haven't discussed it.

Mr. KARTH. Mr. Chairman.

The CHAIRMAN. Mr. Karth.

Mr. KARTH. If these facts were known by the National Science Board at the time that the fellowship was granted, does the law, in your opinion, allow them to have refused the fellowship?

Mr. HOFF. If they had considered that this affected ability?

Mr. KARTH. If they had known these facts about Mr. Yellin at the time that the fellowship was granted, or about to be granted, under the present law could they have refused to grant the fellowship?

Mr. HOFF. If they felt that this affected ability.

Mr. KARTH. If they had known these facts.

Mr. HOFF. I can't answer that, except if they felt this would have affected ability.

Mr. FULTON. Well, you ought to get together. You are on both sides, now.

Mr. KARTH. I was merely pursuing the point as to whether or not the law needs to be changed so that this condition would never be repeated.

The CHAIRMAN. Mr. Van Pelt, any further questions?

Dr. WATERMAN. I didn't realize we had any difference of opinion here.

Mr. HOFF. We may have expressed it in different words, but I know we agree.

Mr. FULTON. You had said originally, Dr. Waterman, that had the facts been known in the Yellin case under the law there would have been the same decision, it would have compelled it, when you answered me.

Dr. WATERMAN. This is my best opinion unless his ability were deemed to be affected.

Mr. FULTON. Then, Mr. Karth was questioning and your counsel was testifying, and counsel has said that he couldn't tell what the situation would have been but it would have been taken into consideration if it affected ability. Those are two distinct philosophic bases for decision, and somebody, either the counsel or the witness, had better get his head together with the other one and come up with one answer.

The CHAIRMAN. We want the testimony as they give it, not as we would like to have it.

Mr. Van Pelt.

Mr. HOFF. Mr. Chairman.

The CHAIRMAN. If you want to straighten it out, all right.

Mr. HOFF. I would also like to give Mr. Karth an answer to his second question.

Mr. KARTH. All right.

The CHAIRMAN. Go ahead with your answer to his second question.

Mr. HOFF. The question of whether the fellowship could be suspended pending determination by the Supreme Court so as to see whether he could actually proceed is, I think, entangled with our general practices and policies to date which have not generally been to suspend fellowships on the basis that somebody might not be able to complete their tenure. They are revoked when they cannot, of course, except for military service.

Now, maybe we are wrong on this, but I think this would have to be treated the same way.

Mr. KARTH. It seems to me we might spend a good deal of money on that basis.

Mr. HOFF. This hasn't been the experience. There have been very few.

Mr. KARTH. I might say for the record, if he is a Communist I would rebel against paying taxes, and also I would agree with my constituents who I feel would agree with me, that they, too, should not pay taxes for the purpose of educating a Communist.

Mr. HOFF. Well, the fact is he has signed the oath and affidavit, so if he is a Communist there may be another crime which has been committed.

Mr. FULTON. Yes, but under these circumstances you here state the possibility of paying Yellin if the Supreme Court reverses.

Mr. CASEY. Mr. Chairman, are the rest of us going to have a chance today?

The CHAIRMAN. I think the point is well taken.

Mr. Van Pelt.

Mr. VAN PELT. Thank you, Mr. Chairman.

Dr. Waterman, when you receive the credentials of an individual applying for a fellowship from a university, that states his grades and probably states his attendance at classes, and so forth.

Dr. WATERMAN. No, these being graduate students, it would be the grades they get in their courses rather than their attendance, I think.

Mr. VAN PELT. In this instance, was this man a graduate student?

Dr. WATERMAN. Yes; he has completed his first year of graduate studies.

Mr. VAN PELT. It refers to 2 years.

Dr. WATERMAN. He wants an intermediate fellowship which is an advanced stage in graduate school, not the first year.

Mr. VAN PELT. But he only attended the university 2 years at the time that he applied for this fellowship.

Dr. WATERMAN. This particular university. He had 1 year of graduate school, and he wanted the fellowship for a second year.

Mr. VAN PELT. Well, you say it wouldn't include his attendance. Wouldn't it indicate the reason for his suspension, and why he was reinstated?

Dr. WATERMAN. I don't think they would go into that, no. It was only a 10-day suspension, and in the graduate school one doesn't keep a record of attendance, just the grades are recorded. If he failed to attend for a long period this would interfere with his passing the course, and would interfere with his grades.

Mr. VAN PELT. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Casey.

Mr. CASEY. I want to pursue again Mr. Karth's question as to whether or not you think if all the facts were known to you, that you had a legal right to refuse to make the grant.

Dr. WATERMAN. This is a difficult question because it is a hypothetical one. We would have to consider whether this had a bearing on his ability, as I read the act.

Mr. CASEY. In other words, Doctor, you feel that when your panel or the panel that assists you makes a recommendation that they are qualified, as to their ability, their motivation, and the suitability for the work, and from what they know he is mature enough, you think that as a matter of right the man is entitled to the scholarship?

Dr. WATERMAN. I am not sure how to answer that particular question. If we have any question about his ability, then he would certainly not have a right to have the fellowship.

Mr. CASEY. No; assume the panel finds that he has the ability.

Dr. WATERMAN. Yes.

Mr. CASEY. That he also has the motivation.

Dr. WATERMAN. Right.

Mr. CASEY. He has the suitability for the work. He is a dedicated scientist. They know nothing about any conviction of contempt of Congress, or anything else, and they make the recommendation to you that he is the topman.

Do you consider, then, as a matter of right that he is entitled to the scholarship?

Dr. WATERMAN. I think I will have to ask counsel about that.

Mr. HOFF. I would say, no. We make the final determination. These panel ratings are recommendations only, and if we had information which we thought would affect the question of ability, we could certainly take that into account in making the decision.

Mr. CASEY. Well, the fact that he has been convicted of contempt of Congress, that doesn't necessarily, you say, mean it would affect his ability to carry out this research under this scholarship?

Mr. HOFF. That is correct, and the National Science Board is the group responsible for making the policy.

Mr. CASEY. All right, suppose he was convicted of contempt of Congress, or some other crime, but he still has the ability, the motivation, and the suitability for the work, do you think as a matter of right—

Mr. HOFF. I don't know about this matter of right. In my opinion, he is entitled to the fellowship having met all of the statutory requirements, then.

Mr. FULTON. I give you notice, don't give this man Yellin a fellowship even if the Supreme Court reverses.

Mr. CASEY. Now, then, you state on page 4 of your statement, Doctor, in the next-to-the-last paragraph there :

In this case while Mr. Yellin has been awarded a fellowship no payments have been made to date with respect to it, nor will any be made until the matter has been thoroughly considered at a special meeting to be held soon by the National Science Board, which has responsibility for establishing the policies of the National Science Foundation.

What policies are they going to establish, if according to you all they can do is just say, well, he has the ability and he has the motivation and the fact that he has been in contempt of Congress wouldn't affect his ability, he has got to get it ; is that right ?

Dr. WATERMAN. Well, it is a matter for the Board to consider whether this does, in fact, affect his ability. The other thing which the Board would do is consider whether there are any changes required in our act to meet situations of this kind, both points.

Mr. CASEY. Well, that is what we are trying to find out right now.

Do you have any opinion that there should be any changes in the act ?

Dr. WATERMAN. I think what Mr. Hoff has suggested has a great deal of promise, but it is a very troublesome matter, and this is not really a thing for one person to decide. We would like to take into account your views here, and also the views of the National Science Board.

Mr. CASEY. Well, I cannot conceive of any board that is administering the moneys of the taxpayers of the United States thinking that they would have to have it specifically written into the law that they could refuse a grant to someone who was convicted of contempt of Congress. I cannot conceive that you would feel that you would have to come up here and ask for a change in the law.

Dr. WATERMAN. Not being a lawyer, I have to depend on general counsel for our position here.

The CHAIRMAN. What does counsel feel ?

Mr. HOFF. Our study on this is still incomplete, but the only case that has, you might say, any relation to this situation is a fairly recent case in the Maryland court of appeals, and while I think that is not an actual precedent for this case because the statute there required a competitive examination, nevertheless the Maryland court of appeals ruled that the statute having set a competitive examination, there was no room for any other considerations to be taken into account by the granting authority, that it was a purely ministerial act, so we come back to the question of whether any of these things affect ability.

Mr. CASEY. Now, you impress me as being a pretty able lawyer, and there is no analogy to this case at all because there is no competitive examination. That gets right back to my question : Do you construe this to be that when he qualifies in this manner that as a matter or right, a matter of law, you have to give him that grant ?

Mr. HOFF. I think we have to do it on the basis of ability. I am not prepared to determine what goes into the question of ability. The statute says solely on the basis of ability.

Mr. CASEY. In other words, if you had refused Yellin this scholarship, and Yellin sued, you think he could recover if no one testified that this didn't affect his ability, these things that are set out ?

Mr. HOFF. This might be used against me, but I think there is a very good chance that he might be successful. I don't know. I am not prepared to answer that because I haven't reached a final opinion on it.

Mr. CASEY. You think as a matter of law he would have a good chance of recovery?

Mr. HOFF. At the present moment, I do. I am still studying this, though.

The CHAIRMAN. Mrs. Weis.

Mrs. WEIS. Doctor, I have been looking over the minutes of the original debate on this statute, and apparently most of this seems to hinge on the words "solely on ability." The legislative history that was written during those hearings reveal that this whole question came up, as I understand it, on the question of geographical distribution of the scholarships; whether they should be granted in a way to cover the country, or whether the only criterion should be ability. It would seem to me, in view of that legislative history, you are putting too much emphasis on this "solely on ability" standard.

Now, you interpret this provision "solely on ability" as covering the whole field, rather than the reason why it was discussed in the committee, and the reason why it was put in the statute, that is, to settle a geographical problem rather than as broad a point of view as you are taking of it.

Is that the position?

Mr. HOFF. I think, Mrs. Weis, it is a difficult problem. The legislative history shows that this particular type of thing was really not considered except in conjunction with what was then section 15(d), where the whole idea of the investigation was dropped, and the oath and affidavit substituted instead.

So if you take these two things together, I think there is a—it is hard to put it on the basis of what Congress had in mind. I am not at all sure this is what Congress did have in mind.

Mrs. WEIS. I have not been here long enough to know what Congress had in its mind, either, but I have heard a great deal said about the intent of Congress being considered as reflected in the legislative history that is written when these statutes are drawn up. It would seem to me that this word "solely" is one of the words that is causing the greatest amount of trouble in this whole question.

Dr. WATERMAN. There is an exception, now, that in the case of substantially equal ability we are to make a wider distribution. Initially in the legislation there was some talk about providing quotas, and it came out finally with this exception.

Mr. HOFF. And the interesting thing about this is that where you do have substantially equal ability the only other test thrown in is the geographic one, so where you are really thrown back to is that while Congress did not think of this particular thing when they wrote in the word "solely," nevertheless the word "solely" is there.

Mrs. WEIS. I am sure the intent of Congress was not to tie your hands the way your hands seem to be tied at the present moment according to your own interpretation of the act.

Mr. HOFF. The point I am making there is that intent can be used to construe a statute but where a statute gives a clear test, here, solely on the basis of ability, then it seems to me we are limited to construing ability as best we can.

There is some interesting language in this Maryland case. It is a page or so; if you would care to hear it I would be glad to read it.

The CHAIRMAN. Read only the pertinent portions.

Mr. HOFF. Certainly.

Mr. CASEY. Just a minute, Mr. Chairman. This Maryland case sets out specifically there are to be competitive examinations, and the award goes to the top candidate.

Mr. HOFF. That is what I said; it is a much clearer case.

Mr. CASEY. But it is not analogous to the case before us at all.

Mr. HOFF. It is the closest we can find. That is what I am saying.

Mr. RYAN. Mr. Chairman, I will suggest that that is something lawyers can reasonably differ about.

The CHAIRMAN. Why not just give us your interpretation of what the law is.

Mr. CASEY. Just one thing. I am getting back to the point that if the National Science Board should just say no, he can't have the fellowship for any reason whatsoever. The Board is the sole judge of whether he has met this test or not.

Mr. HOFF. I think that this comes within some sort of rule of reason.

Mr. CASEY. The man couldn't go into court and bring in all of his friends to say that they think he has met all of these requirements and has the ability because the Board is the sole judge as to whether or not he has the qualifications under the statute.

Mr. HOFF. I don't know whether we are now talking about the case as it presently rests. As it presently rests now there has been a determination that he had the ability. The only new information we have been discussing would be the question of the conviction.

Mr. CASEY. All right, and the Board could say this conviction would affect his ability and there wouldn't be anything he could do.

Mr. HOFF. That I don't know. It would be an interesting question.

Mr. CASEY. He could file a suit.

Mr. HOFF. But the Board has to apply what would stand up as something related to ability. The Board can't just say because you have green hair we don't think you have got the ability. Therefore, it would be up to us to prove that the question of the conviction is something that reasonable men, well informed on what goes into ability, could reasonably take into account in deciding ability and, therefore, he was not entitled to it.

Also, the award has been made, and that is another question, but I am not prepared to discuss that question.

The CHAIRMAN. Mrs. Weis, are you through?

Mrs. WEIS. No, I have two other short questions.

Who made up the application for scholarships, the National Science Foundation?

Mr. HOFF. Do you mean the form of application?

Mrs. WEIS. Yes.

Dr. WATERMAN. The National Science Foundation.

Mrs. WEIS. Was any question given to including such questions as appear in form F-57 as to prior convictions?

Mr. HOFF. I don't recall that.

Dr. WATERMAN. We considered this carefully, and I don't recall that we went into that at all except to try to stick to the qualifications which the act specified. It was designed that way.

Mrs. WEIS. Finally, may I ask you, have you been satisfied up until this point that this procedure has worked satisfactorily?

Dr. WATERMAN. It has worked very well, indeed, yes. This fellowship program has been in existence for about 9 years.

The CHAIRMAN. This is your first case of this character?

Dr. WATERMAN. That is correct.

Mr. HOFF. There have been 65,000 applications, and approximately 18,000 awards, and this is the first case like this that I know of.

The CHAIRMAN. Mr. King.

Mr. KING. Looking at this problem abstractly, and apart from the statute that is now before us, it would seem to me that a board in passing on applications would have two considerations.

First, the board would be concerned with the individual qualifications of the applicant. This would be matters of his aptitude, his scientific ability, his emotional stability, and maturity, and all of the things we have talked about. The second consideration would be whether the granting of the application would serve the best interests of the United States of America. We assume that this program was set up to advance science in America, so that our scientific effort could receive a new thrust, a new dimension. So this second consideration would be "Would the granting of this particular application serve the best interests of the United States of America?" Apart from the matter of communism, I can conceive of situations where granting a fellowship would not be in the best interests of the United States.

Suppose, for example, the applicant admitted right on the application that as soon as he finished his advanced studies he was going to leave this country and go to some other country.

The CHAIRMAN. Russia, for example.

Mr. KING. That would further complicate it, but suppose it wasn't even Russia. Suppose it was some neutralist country, or suppose he admitted that after completing his studies he was going to abandon the life of science, maybe he is a writer and was going in to this scientific training just to give him background so that he could write a scientific novel, or something like that. These are far-fetched examples, but I think they are valid. I think in that case it would not be to the best interests of the United States to grant such a fellowship even though the man was highly qualified.

Now, my question, and I think you have already answered it but I just want to make certain that I understand, my question is, Does the statute as it is now constituted give you the right to consider this second element at all, or is your consideration entirely on the basis of individual merit and individual aptitude and qualification?

Mr. HOFF. That is correct, sir, we could not take these other things into account, in my opinion.

Dr. WATERMAN. These are matters, though, that would be likely to be mentioned by the letters coming in.

Mr. KING. But you consider them only insofar as they affected the man's aptitude and ability, even though—pardon me, go ahead.

Mr. HOFF. Well, I was going to say ability to pursue his studies, which wouldn't necessarily end 6 months later. In other words, I do think that there is a question if we are giving a fellowship intended to make someone a better teacher of science, if he is not going to be a teacher of science that is something that would then count him out.

In other words, it is ability, but ability to pursue his studies and chosen career successfully.

MR. KING. I understand, but I think I still have a point. I think my point still stands, that is it is conceivable that it might be contrary to the best interests of the United States to grant the fellowship even though the man passed 100 percent on every test of ability, his capacity, aptitude, et cetera?

MR. HOFF. That I would agree with.

MR. KING. Now, I would like to suggest, and I am just speaking as one Congressman, that I feel that the statute is deficient to the extent that it does not allow you to consider this other element, which is: Will this be for the best interests of the United States? I realize, of course, that that is somewhat a subjective item that might possibly inject a matter of politics, and all of these other things, that we want to keep out of this, this is supposed to be strictly scientific, and I understand that this does open up some real pitfalls. Notwithstanding that, speaking just for myself, I feel that the statute is deficient if it does not allow you to take this other element into consideration.

THE CHAIRMAN. Mr. Mosher.

MR. MOSHER. Mr. Chairman, I would like to take a completely different tack, if I may. Rather than ask a question, I would like to offer this comment for the record.

I am greatly concerned, as an individual member of the committee, about the possibility, and even the probability, that there will be a strong implication in these hearings, in the emotional tone of these hearings, an implication which I feel we should guard against, an implication that scientists must be political nonentities, political nincompoops, political eunuchs, so to speak, if they are to obtain Government support.

I don't think scientists should be fearful in their expressions of political opinion. I think that all of us on this committee, and I suspect that I am just stating the obvious, that all of us on the committee would agree that scientists should be under no compulsion to be fearful in their expression of political views. For example, they should not be fearful about signing petitions, as such. They should certainly be responsible, of course, but they should not feel gagged and timid.

I wish the Foundation's procedures were such that Mr. Yellin had not been given the grant, but I think it is an even greater mistake on our part in the committee here if the tone of our comment is such as to give the public an impression, and the scientific and academic community the notion that whenever an individual expresses an unpopular opinion, or signs an unpopular petition, he in effect seriously risks his professional career. I hope in these hearings we can guard against that.

THE CHAIRMAN. Mr. Morris, do you have a comment or question?

MR. MORRIS. Yes.

Doctor, what is confidential about the files of an applicant for a National Science fellowship?

DR. WATERMAN. The usual thing. If one gets letters of recommendation for a candidate for a position, one expects that the people who write the letters can say anything they feel like in the way of personal allusions, and so on, which if they felt the matter was going

to be public they would hesitate to say. This would mean that the information that we would get would be very limited and guarded, so similar to any other letter of recommendation for a position. One likes to have very frank statements of opinion, and, therefore, we tell these people that we keep these reports confidential.

Mr. MORRIS. But you did say in answer to a question yesterday that you would furnish these confidential files to the committee counsel.

Dr. WATERMAN. With the understanding that you keep them confidential, too.

Mr. MORRIS. You are not furnishing them to me, so there is no understanding with me on this, don't get me wrong. I said the committee counsel.

Dr. WATERMAN. Yes.

Mr. MORRIS. You will furnish them to him?

Dr. WATERMAN. This would be for the perusal of the committee, but we would like to ask that you keep them confidential, too, for the reason that I mentioned.

Mr. MORRIS. Are you saying that you will furnish them?

Dr. WATERMAN. If you would like to have us do so, on a confidential basis.

The CHAIRMAN. They will be available for all of the members of the committee.

Mr. MORRIS. Well, I am finally happy that we got that answer, Mr. Chairman, if we didn't get any other answer.

Now, let me ask this question: How many fellowships have you granted to other people who have been convicted for contempt of Congress?

Dr. WATERMAN. None; this is the first case.

Mr. MORRIS. How do you know, if you don't check them?

Dr. WATERMAN. As far as we know.

Mr. MORRIS. If you don't check them how do you know?

Dr. WATERMAN. This is the first case that has come to our attention. That is all I can say.

Mr. MORRIS. Did you ever grant a fellowship or scholarship to an individual by the name of Clinton Jencks?

Dr. WATERMAN. I don't know. We would have to check that.

The CHAIRMAN. Does the gentleman want that looked up?

Mr. MORRIS. I would appreciate that, Mr. Chairman.

The CHAIRMAN. If you could, Doctor.

Dr. WATERMAN. What was the name again?

Mr. MORRIS. Clinton Jencks.

The CHAIRMAN. Where is he from?

Mr. MORRIS. He was in New Mexico at one time. I don't know where he is at the present time, Mr. Chairman, and I don't know that he has been granted a scholarship. Somebody told me that he was, but I don't know that that is a fact.

Mr. RUTTENBERG. He had a fellowship, but I don't believe it was one of ours.

Mr. MORRIS. He had a fellowship, but not one from the National Science Foundation?

Mr. RUTTENBERG. That is correct, I believe. I will look it up.

Mr. MORRIS. I would appreciate that.

(The information requested is as follows:)

Mr. Morris asked whether the Foundation had ever awarded a fellowship to a Mr. Clinton Jencks. We have never awarded a fellowship to anyone by that name.

Mr. MORRIS. As I understand it, you notified the Justice Department about the case that is presently under consideration. What did the Justice Department tell you?

Mr. HOFF. We haven't received any reply.

Mr. MORRIS. Oh, the Justice Department hasn't advised you on this case yet?

Mr. HOFF. It isn't a question of advising us. It is a question of whether they choose to take action. If there is perjury here it is a Justice Department matter.

Mr. MORRIS. When did you refer it to the Justice Department?

Mr. HOFF. A few weeks ago.

Mr. MORRIS. And you don't know what the Justice Department has done, or what they intend to do?

Mr. HOFF. I do not. They presumably will tell us eventually.

Mr. MORRIS. And in answer to Mr. King's question, as I understood your answer, you cannot take into account the national interest when awarding these fellowships?

Mr. HOFF. I am afraid the national interest as expressed in the statute is that fellowships should be given to persons with ability who sign the oath and affidavit. Obviously, a perjured oath and affidavit would be another thing.

Mr. MORRIS. Let me ask you this question, Doctor. Have you ever turned down a fellowship after this advisory board has recommended it to you?

Dr. WATERMAN. Well, they don't advise us which ones to give. They just give us the candidates in the order of their quality and then we make the selection from that. We have to look into the wide distribution of those of substantially equal ability when we reach that point. But they don't tell us which ones to make.

Mr. MORRIS. Well, you have that authority.

Dr. WATERMAN. Yes.

Mr. MORRIS. You have the ultimate responsibility?

Dr. WATERMAN. That is correct, yes.

Mr. MORRIS. All right, so you awarded this fellowship to Mr. Yellin. Now, can't you cancel that fellowship yourself?

Dr. WATERMAN. This would be a matter that I would immediately bring to the attention of our Board because this would be a policy matter, of course. Now, I don't know what they would answer. For example, if it were proved that he committed perjury in signing the affidavit, I am reasonably sure that the Board would then, and I would agree, want to cancel it.

Mr. MORRIS. Well, have you ever canceled a fellowship after you have awarded it?

Dr. WATERMAN. No, sir; not that I am aware of.

Mr. CASEY. Will the gentleman yield?

Mr. MORRIS. I yield to the gentleman from Texas.

Mr. CASEY. You are construing the text pretty closely and pretty strictly and pretty narrowly, wouldn't you say?

Mr. HOFF. I wouldn't. That is my opinion, that is about all I could say. Certainly I could be wrong.

Mr. CASEY. I didn't understand your answer.

Mr. HOFF. I don't feel that I am being a bit narrow, but I could be wrong. This is just my opinion. I can't say more than that.

Mr. CASEY. Well, when you hinge it completely on this ability, that is a pretty narrow construction, isn't it?

Mr. HOFF. Excuse me. I tried to say before that I don't feel that I can say what affects scientific ability. I think this is something the National Science Board can say. If the National Science Board feels that conviction in this case affects scientific ability, they can say it. All I can say is that any tests have to be related to ability.

Mr. CASEY. All right. Now, you referred this matter to the Justice Department. Has there been any call of the Board to consider this?

Dr. WATERMAN. Yes, we are bringing it before the Board.

Mr. CASEY. When is the meeting going to be held?

Dr. WATERMAN. The end of this month.

Mr. CASEY. The end of this month?

Dr. WATERMAN. Yes, as soon as we get the Board together.

Mr. CASEY. Well, under your delegation of authority, couldn't you make that determination, yourself, or do you not want to assume that responsibility?

Dr. WATERMAN. No, this is a policy matter, and policy matters I am required to bring to the attention of our Board.

Mr. HOFF. The delegation does not include matters of policy.

Mr. CASEY. Well, you wouldn't consider the awarding of this fellowship as against public policy to award scholarships to someone of this nature?

Dr. WATERMAN. I would certainly think that this was a policy matter, and, therefore, the Board would have to be consulted.

Mr. CASEY. Are you going to make any recommendation to the Board, Doctor, or would you prefer not to answer that at this time?

Dr. WATERMAN. I would like, as I said earlier, to have the Board consider the policy with respect to cases of this kind, and not just this individual case, and at the same time consider what in their opinion might be feasible ways of changing either our procedures or the legislation, and make a recommendation to you people in the latter case.

Mr. CASEY. Well, now, when you say "policymaking," are you going to tell them that they are limited and restricted in the construction of this statute to passing only on his ability and how this would affect his ability?

Dr. WATERMAN. I would think it would have to be made clear, and counsel will try to do this, just what the authority is from the act, and this would be the basis on which they would start the discussion.

Mr. CASEY. Well, in my opinion, a true dyed-in-the-wool Communist would have no compunction about signing an oath at all that you require.

Dr. WATERMAN. That, of course, is a weakness in the whole system, Mr. Casey. That is there, anyway.

Mr. CASEY. And if he signs that oath, in your opinion the Board is going to have to just gage him solely on his ability, and how his conduct in the past would affect this ability?

Dr. WATERMAN. That is correct, and, as I said before, for a scientist integrity is a very important characteristic.

Mr. CASEY. I agree with you, but I don't think we need to spend tax moneys to educate someone who isn't loyal in my opinion. I'm not referring necessarily to this case, I don't know Mr. Yellin and don't know all of the facts of the case, but I don't think we should spend tax moneys educating someone who is not dedicated to the principles and ideals of our American form of government.

Dr. WATERMAN. Don't you feel that this is covered by the affidavit?

Mr. CASEY. That goes back to what I said. I can readily see where a dyed-in-the-wool Communist would have no compunction about taking any kind of oath.

Mr. HOFF. If I may get into this, Mr. Casey, this is one of the real problems. I agree with you, that I don't think that the affidavit of disbelief which I think is what we are talking about, even more than the loyalty oath, necessarily stops the ones that it is aimed at.

Mr. CASEY. By the same token, I cannot see any court in the United States saying that this Board would be bound by the narrow construction that you have given to the statute.

Mr. HOFF. You might be right. I feel the other way.

Let me go on with this. The problem that you then get into, if the oath and affidavit are signed for an organization like the Foundation without the ability of a court to get at the facts, if it were to try to judge on the basis of accusations or what have you, you have complete chaos. This is why I made the plea that if we are going to do something we should try to be as specific as possible and not leave too much discretion up to a group that is not in the position to really sift it all out.

The CHAIRMAN. Mr. Ryan.

Mr. RYAN. I would like to come back to a few of what I think are significant factors in this case, which I think have been overlooked.

In the first place, this case is still on appeal. The Supreme Court has not resolved the question of whether or not the defendant in this case was properly exercising his constitutional rights in refusing to answer questions.

So, No. 1, I would think, and correct me if I am wrong, that in making any determination within the National Science Foundation you would certainly have to consider that.

Mr. HOFF. Yes.

Mr. RYAN. And it would seem to me that you would not be in a position until the Supreme Court had ruled to consider the effect of this conviction.

Now, do you agree with that?

Dr. WATERMAN. This has been my thinking. This is one reason why I would want to have it carefully discussed by our Board as to what the procedure should be here, and I think that is an important point.

The CHAIRMAN. Will the gentleman yield?

Mr. RYAN. Yes.

The CHAIRMAN. As I understand it, this is a final conviction subject only to a right to request a writ of certiorari, isn't that right?

Mr. HOFF. That is correct.

The CHAIRMAN. And so it is final as an appellate conviction.

Mr. HOFF. That is right, it is just short of the Supreme Court.

Mr. RYAN. If the chairman would yield, however, the defendant has not exhausted his rights to appeal.

The CHAIRMAN. Not until the writ is denied.

Mr. RYAN. Now, I would like to come back to another significant fact, and that is that under the law the applicant signed two affidavits and filed them with the National Science Foundation; is that right?

Mr. HOFF. That is correct, the oath of allegiance, and the affidavit of disbelief.

Mr. RYAN. The affidavit of disbelief I think you said was filed on January 6, 1961.

Mr. HOFF. By then, anyway.

Dr. WATERMAN. It accompanied his application.

Mr. RYAN. And when did you become aware of the fact that there was any question concerning this applicant?

Dr. WATERMAN. April 4, I believe.

Mr. RYAN. Two months ago. How did that come to your attention?

Dr. WATERMAN. A member of the staff of the Un-American Activities Committee informed us.

Mr. RYAN. And I believe it was testified that you notified the Justice Department that there was a question in this case. Who notified the Justice Department?

Mr. HOFF. I did.

Mr. RYAN. And when?

Mr. HOFF. I don't remember the exact date, but it was sometime, the end of May.

Mr. RYAN. Between April 4 and today, has any representative of the Justice Department taken any action as far as you know in this matter?

Mr. HOFF. No, sir; I don't know.

Mr. RYAN. As far as you know?

Mr. HOFF. As far as I know.

Mr. RYAN. Has any representative of the Justice Department questioned the custodian of the files in this case?

Mr. HOFF. No.

Mr. RYAN. Where is the affidavit?

Mr. HOFF. In the Foundation.

Mr. RYAN. So that if there is any evidence of perjury, the affidavits would be necessary to any prosecution; is that correct?

Mr. HOFF. That is correct, and we have advised the Justice Department that the oath and affidavit have been executed.

Mr. RYAN. And the Justice Department has not secured these documents from you for the basis of a prosecution, but has been content to let them rest in your files?

Mr. HOFF. That is correct.

Mr. RYAN. So that we have a man who has been convicted of no substantive crime; is that correct?

Mr. FULTON. What do you mean, substantive?

Mr. RYAN. He is convicted of contempt.

Mr. HOFF. He is convicted of contempt?

Mr. RYAN. He is convicted of perjury?

Mr. HOFF. There has been no indication on a charge of perjury, as far as I know.

The CHAIRMAN. You wouldn't infer, though, that his conviction was of something that was not a substantive crime?

Mr. HOFF. No; what I tried to say was that the conviction for contempt of Congress is presently there subject to the appeal to the Supreme Court. There is no necessary connection, initially, of course, between the conviction, if it stands, in the contempt of Congress case and possible perjury. The two things might or might not have any connection.

Mr. RYAN. Yes, but the way to prove the falsity of the application, if it was false, is to bring a prosecution. As far as you know, there has been no indictment?

Mr. HOFF. That is correct.

Mr. RYAN. I think that I would like the record to show, and I think it does, that the National Science Foundation has referred this matter to the Department of Justice, and the Department of Justice has, for whatever reasons, found no cause for immediate action.

The CHAIRMAN. Will the gentleman yield?

I think it is the purpose of this hearing to correct any weaknesses in the statute—to correct the statute looking to the future to prevent a recurrence. We can't prevent what has already happened.

Isn't that your idea, Mr. Ryan?

Mr. RYAN. Yes, Mr. Chairman. What I am coming back to is what criteria you would use in denying, if you were to deny a scholarship. Would you use the criterion of a conviction for perjury, or would you use something else? Also, let me raise this question: Assume, and this I think your lawyer is better qualified to answer than you, Doctor, assume that in the session before the congressional committee the applicant, instead of invoking the first amendment, which apparently is the reason he was convicted, because he relied on counsel and invoked the first amendment, assume that he had invoked the fifth amendment, and as a result his constitutional right had been upheld, and there was no contempt, and thereafter he applied to your Foundation, and it came to your attention that you had an applicant who had invoked the fifth amendment, would you consider that in determining whether or not to award a scholarship?

Mr. HOFF. Well, this gets into the heart of the whole problem, in that it seems to me that a determination of what enters into this is extremely difficult. As a matter of fact, on the fifth amendment situation I believe that some universities will not accept people who have plead the fifth amendment. Others will. Certainly, if somebody has invoked the fifth amendment, and it has been upheld, they have invoked a constitutional right, and you then get into the question of trying to judge their moral character of whether they have plead it for a pure reason or an impure reason, and I don't know how the Foundation could ever decide things like that.

Mr. RYAN. No, I would agree with you, but I would think that you can see the point where this might take us.

Mr. HOFF. Oh, I certainly do, and I think it is extremely difficult, and that unless—I don't think that merely talking in generalities, and leaving this to an administrative body, is at all possible. I think that the only way would have to be to have legislation as to what are the things which Congress feels should prevent fellowships or scholarships being given by the National Science Foundation, and have it

so prescribed, and then have it made a criminal penalty not to reveal those things to the Foundation, and then, of course, we can administer such a statute. I don't know how much good this will do, but at least it is practical.

The CHAIRMAN. I would say this: Of course, this award of a fellowship is a beneficence. We give it to a student to encourage him to do further academic work, and in the end this benefits the country. In handling matters where you are dealing with gifts, beneficences to individuals, it would seem to me that you would use a stricter rule regarding the rigidity of your requirements for measuring up to what is the standard intended by the law.

Now, where they have earned something as a matter of right, you can say, "Here is the law and we rely on it as a matter of right," but where you are dealing with gifts to individuals to benefit your Nation, aren't you required to adopt a stricter rule?

Dr. WATERMAN. I think there is another point which is very important, Mr. Chairman, and that is it is not only an assistance to the man to develop himself. The very important thing is the national purpose of strengthening science and the country.

The CHAIRMAN. Assisting the country.

Dr. WATERMAN. It does two things. One, it develops a good scientist, hopefully, who will increase the potential of the country scientifically and the other is as an individual he will produce research results which are very important to the national security in the long run, so those factors are in there as well.

I think it shouldn't be looked at purely as of benefit to the man. It is very definitely in the national interest.

The CHAIRMAN. I think the whole thing should be looked upon as a benefit to the United States. That is the reason that I think that in making awards of gifts which are for the purpose of benefiting the United States, we are justified in a rather rigid rule regarding moral principles and principles of stability of character.

Now, this particular law says the National Science Foundation shall consist of a National Science Board and a Director so that really the National Science Foundation is two parts—the Director and the Board. The two together are the ones to make the rules and to see that they are properly applied; isn't that right?

Dr. WATERMAN. That is correct. On the policy the Board is the body. I am required to bring to their attention matters of policy.

The CHAIRMAN. And then the Director sees that the policy is carried out. Mr. Fulton.

Mr. FULTON. With the other members' permission, I would like to adopt a line of questioning to nail down this man Yellin, to prevent him from getting this scholarship or grant award.

I intend to show first that under the terms of the National Science Foundation Act of 1950, Public Law 507 of the 81st Congress, contrary to counsel's advice, there should be taken into consideration language under the "purposes of the act" the national defense of the United States and other welfare items.

The preamble says, "An act to promote the progress of science, to advance the national health, prosperity, and welfare, is to secure the national defense, and for other purposes."

Therefore, there are other factors which can be considered within the discretion of the Director in granting these scholarships and research fellowships.

The second point is this: When it is a gift or grant, I believe your counsel would agree with me that there is no contract and, therefore, there can be a revocation or suspension at any time until the applicant or the recipient receives the money, is that not the case?

Mr. HOFF. I don't entirely agree, Mr. Fulton. Take the Maryland case I cited. It was merely a refusal to give it. That was a scholarship grant and the officials were mandamusd.

Mr. FULTON. I must respectfully disagree with you, and agree with my colleague, Mr. Casey.

Mr. CORMAN. Would you yield for one question?

Mr. FULTON. I don't believe I should yield until I get my case in.

Mr. CORMAN. Then I will call for a point of order.

Mr. FULTON. If you would like it as a friendly matter, I will yield on that basis.

The CHAIRMAN. Well, does the gentleman yield?

Mr. FULTON. Yes.

Mr. CORMAN. I would like to ask if your purpose in this line of questioning is to stop this grant. Do you anticipate doing that by congressional action?

Mr. FULTON. No, I would like to show that the man on prima facie evidence is a perjurer and I have the documents here to show it.

Mr. CORMAN. Then I would request of the chairman if that is in order before this body.

Mr. FULTON. Well, if you will let me put my line of questions, you can then determine that.

Mr. CORMAN. I will withdraw my point of order.

The CHAIRMAN. Let's proceed in the proper manner. These witnesses are here to answer questions. If the gentleman has in mind asking them questions, go ahead and ask them to obtain the information.

Mr. FULTON. I am going to.

The CHAIRMAN. Now, if it isn't for that purpose, there is no need to keep them. We can have the gentleman's presentation without the witnesses.

Mr. FULTON. Let me tell you I don't want this man, Edward Yellin, to get this grant and it looks as if you have done nothing in the National Science Foundation to block this man getting this grant. It now stands to his credit in the name of Edward Yellin, doesn't it?

Mr. HOFF. We have not made any payments.

Dr. WATERMAN. We have made no payments as yet.

Mr. FULTON. No, but you have done nothing to cancel or revoke or suspend at this time. Is that correct?

Mr. HOFF. We have made no payments.

The CHAIRMAN. Well, we want to know if it is correct or not.

Mr. HOFF. We have taken no action to revoke or suspend the fellowship but we have not made any payments and he is not entitled to any payments at this point.

Mr. FULTON. Then on the fellowship application, form 9C50-A signed by Edward L. Yellin, on January 2, 1961, I hold a photostat in my hand supplied by the National Science Foundation, on the blocks

labeled "college or university and State in which located, inclusive dates of attendance, earned degree, date of award expected, major field or specialization", there appears the following:

"University of Michigan, 1-48 to 6-49. Major field of specialization, mechanical engineering and liberal arts City College of New York 1-45 to 6-45" and under that in the same block, "9-46 to 1-48" and over in the "major field or specialization," it says "preengineering."

In the hearings before the Committee on Un-American Activities of the House of Representatives under dates of February 10 and 11, 1958, there is the exhibit on page 1983, on the page that begins, "Communist infiltration in basic industry," the document marked "Yellin Exhibit No. 3." Reading from Yellin exhibit No. 3 at the bottom two lines, I will read what Mr. Yellin said about his activities.

Mr. RYAN. Objection.

Mr. FULTON. Will you let me put my question, please?

Mr. RYAN. A point of order.

Mr. FULTON. I am coming to the question. Just a minute, I refuse to yield. It says February 1948 to April 1, 1948, Modern Distributors, Michigan, electrical helper, and April 1, 1948, to May 1949, it says R.E.O., M.D.R., electrical helper, in Lansing, Mich., and it says previous employment other than United States Steel Corp., and it is on the application form of Carnegie Illinois Steel Corp., application for employment dated June 23, 1948, as an electrician's helper by Edward Yellin and he gives his address as 400 Jefferson, Gary, Ind.

Now, have either of you men compared that application for employment, where covering the same date he says in one place he is an electrician's helper in Lansing, Mich., and in the same period of time he is at the University of Michigan and the City College of New York taking preengineering and mechanical engineering and liberal arts.

Have you seen those before or compared them?

Dr. WATERMAN. Not that I know of. It is conceivable he could have employment and study at the same time. Many students do.

Mr. FULTON. Well, now how about the City College of New York during the same period? Could he have been there and in Lansing, Mich.?

Mr. RYAN. A point of order, Mr. Chairman.

Dr. WATERMAN. Was this summer employment?

Mr. RYAN. I think we are trying a particular individual, Mr. Chairman.

Mr. FULTON. I am saying if there is evidence that there may be perjury which is on its face covering the same period and has yet to be explained under this statute, shouldn't you take immediate action. I will ask counsel that.

Mr. HOFF. I would be glad to look into this further.

Mr. FULTON. I will pass them to you and you examine them.

The CHAIRMAN. Well, now wait. They are in as a part of the record.

Mr. FULTON. This is a very serious thing.

Mr. HOFF. There isn't perjury actually, is there?

Mr. FULTON. If you don't have authorization when there is possible perjury shown right on its face by the record under oath, one appli-

cation and the other an oath, and you don't have any obligation to take action under this statute, it is a very serious question.

Mr. HOFF. Just as a technical point—

Mr. RYAN. Will the gentleman yield?

Mr. FULTON. I won't yield.

Mr. HOFF. As a technical point, the application to the steel company is not under oath but I am not saying if there is a false statement on the application it can't be taken into account but I don't think that is perjury there.

Mr. FULTON. It would be perjury before the Un-American Activities Committee, but on the application it would be a false statement.

Mr. HOFF. That is correct.

Mr. FULTON. If there is a false statement, it should be checked.

Mr. HOFF. I agree.

Mr. FULTON. And before there is disposition of the Yellin case giving the man money, we certainly should know what has happened.

Mr. HOFF. We will be glad to look into it.

Mr. FULTON. Therefore, as of today you will not pay the man, will you, while this stands unchecked.

Mr. HOFF. We are not paying

The CHAIRMAN. The gentleman has already said they are not paying him at the present time and when we adjourn, I want to have a few moments executive session to see what action the committee wants to take during that time.

Mr. FULTON. On page 2 of the statement, Dr. Waterman, at the time the award was made to Mr. Yellin, we had no knowledge of the difficulties in which Mr. Yellin had been involved.

Now, the question comes on what that statement means. On the reverse of this application of Mr. Yellin the four professors given were Dr. R. J. Maurer, professor of physics, University of Illinois, Dr. H. J. Hurst, Department of Engineering, Dr. W. L. Choud, Department of Engineering, Prof. S. Consoe, Department of Mechanical Engineering, University of Illinois, and the known faculty adviser was Prof. S. Consoe. The question is: Was it not known to you individually, Dr. Waterman, or was it not known to these people, or was it not known to the National Academy of Sciences, National Research Council, or a panel, who wasn't it known to?

Can you outline to us just who knew and who didn't know?

Dr. WATERMAN. We in the Foundation did not know.

Mr. FULTON. No employee of the Foundation knew?

Dr. WATERMAN. Not that I am aware of, no.

Mr. FULTON. And to your knowledge did any one of these people who recommended this individual, Yellin, know this background or did they divulge it to you?

Dr. WATERMAN. We have no information about that.

Mr. FULTON. Had they ever been questioned as to whether there was adverse information they might have known about an applicant, is that the usual process on an application?

Dr. WATERMAN. No.

Mr. FULTON. Would the panel that was set up to pass on this particular application have known?

Dr. WATERMAN. To the best of my knowledge, they had no way of knowing except from the content of the letters.

Mr. FULTON. Well, it seems apparent to me that there is just not the organization at present in the National Science Foundation either to do the necessary checking, or the discretionary decision work at this time, and if you can give me some way to correct that on organizational recommendations or amendments, I will be glad to have it.

My last point is this: I have from time to time said on this committee that both for the National Science Foundation, and the Bureau of Standards, and probably the National Academy of Sciences, that we should have annual authorization of appropriations with supervision over the programs.

At present we don't. They go only before the House Appropriations Committee and the Senate Appropriations Committee.

You have not taken a position favoring my position previously. Would you now do it under these circumstances?

Dr. WATERMAN. I see no reason for changing our opinion, Mr. Fulton. I think that the advantages of the present system are considerable, quite apart from this case.

Mr. FULTON. Well, wouldn't it help you to have this Science and Astronautics Committee looking over your programs and checking with you as to direction and policy so that you get a look not only at the money matters but likewise the handling of the policy.

Wouldn't that be of help to you?

Dr. WATERMAN. We have always felt that you have been very cooperative in connection with our programs and we felt that this has worked very well.

Mr. FULTON. Thank you.

The CHAIRMAN. Now, the committee will go into executive session to discuss this matter and to determine future policies of the committee in reference thereto. We want to thank Dr. Waterman and the other witnesses for being present this morning. I am sure counsel will be in touch with you in reference to any changes which we may contemplate in the act.

Dr. WATERMAN. Thank you.

The CHAIRMAN. The committee will now go into executive session.

Mr. FULTON. May I have in the record the letter of the chairman of June 14 to show I tried to consult with committee counsel to save time rather than having to develop all of the questions at this particular hearing.

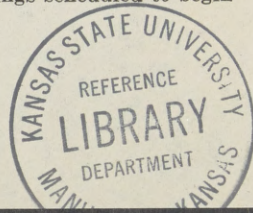
The CHAIRMAN. If there is no objection to the letter being in the record it will be included.

(The document referred to follows:)

COMMITTEE ON SCIENCE AND ASTRONAUTICS,
HOUSE OF REPRESENTATIVES,
Washington, D.C., June 14, 1961.

HON. JAMES FULTON,
House of Representatives,
Washington, D.C.

DEAR JIM: Mr. Frank R. Hammill, Jr., a member of our staff, has just handed me a list of requests made by you covering almost a page and a half, and all requests relating to the National Science Foundation hearings scheduled to begin tomorrow morning at 10 o'clock.



It is obvious that these requests cannot be completed within the length of time specified. Furthermore, I have advised Mr. Hammill to continue with his work on the organization and presentation of these hearings in the morning.

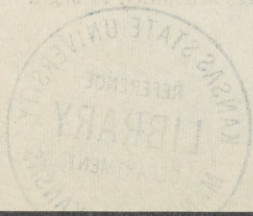
I suggest that in the future you get my approval to all requests before presenting them to the members of the staff. In this way, confusion will be eliminated and a proper handling of the affairs of the committee will occur.

With kind regards, I am,

Sincerely yours,

OVERTON BROOKS,
Member of Congress, Chairman.

(Whereupon, at 12:08 p.m., the committee proceeded in executive session.)



AWARDS OF FELLOWSHIPS AND SCHOLARSHIPS UNDER THE NATIONAL SCIENCE FOUNDATION ACT

TUESDAY, JULY 20, 1961

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE AND ASTRONAUTICS,
Washington, D.C.

The committee met at 10 a.m., pursuant to adjournment, in room 214-B, New House Office Building, Hon. Overton Brooks (chairman) presiding.

The CHAIRMAN. The committee will come to order. This morning we hope to conclude the hearings that were opened last month with witnesses from the National Science Foundation. I have asked Dr. Waterman to appear again this morning and address himself to the legislative proposal that we have before us, H.R. 7806. In addition to that, when we are finished, we would like to take up the report of Subcommittee No. 1, which accompanies H.R. 2049, headed by our colleague, Mr. Miller of California. He has submitted a very important report covering the metric system that we would like to take up and dispose of this morning.

Dr. Waterman, we would be pleased to hear from you, sir, in reference to whatever observations you have to make regarding H.R. 7806 which I introduced after the hearings that we held last month. I think you have a prepared statement.

Dr. WATERMAN. Yes, sir; I do. I want by way of preliminary, Mr. Chairman, to emphasize to you and the committee the importance and the seriousness of the situation here in this matter of policy. I have been some 22 years in the Government in scientific work, 2 years in the Army during World War I, and then 4 years with Dr. Bush in the Office of Scientific Research and Development, 5 years in the Office of Naval Research before I had my present position. So I have seen a great deal of scientists in all sorts of circumstances. I wanted to emphasize the fact that I don't know by and large any more loyal group than the scientists, as I have seen them at work. In the matter of high security, I have seen a great number of scientists hold a matter of high security completely proof against all comers. They are a very trustworthy lot in general. One, of course, does find exceptions. In my experience I have seen those as well. While the matter before us does not involve national security in any direct sense, I do want to say that the scientific group are among the most loyal we have, and that the country badly needs them now. So that any solution to policy in this matter, it seems to me, should be one which is thoroughly understood by this group, so that we can count on their full cooperation.

The CHAIRMAN. Doctor, I want to say this, and I think I can chorus the views of all the members of the committee, we join with you in stating that we also think that the scientists throughout the length and breadth of the United States of America are loyal and patriotic to the core. We are happy personally to make this declaration openly. We don't want anything done here to reflect upon the loyalty of the scientific community throughout the country. In dealing with the present matter it is nice to point out to you however, that we are not dealing with scientists, we are dealing with would-be scientists. It is good to keep the stream pure if possible, so that those who come into the scientific community will be prepared to maintain the high record of the patriotism and the high standard of loyalty of our present scientists.

Dr. WATERMAN. Right. I am sure that this committee and I understood each other in the past on cooperative questions of this kind. So I think that goes without saying. I would certainly agree to what you have just said. Our fellows, of course, are not—they are not schoolboys. They are in the graduate schools so they are mature people but they are not full-fledged scientists. The postdoctoral fellows are. Those are senior people that have been years in their profession. They may be well on toward later years even. So the fellowship does cover a wide range.

With that background, Mr. Chairman, my statement is as follows:

STATEMENT OF DR. ALAN T. WATERMAN, DIRECTOR, NATIONAL SCIENCE FOUNDATION

Mr. Chairman and members of the committee, in accordance with your request, I am appearing here this morning to present the views of the National Science Foundation on H.R. 7806, which would amend section 10 of the National Science Foundation Act of 1950 so as to eliminate the requirements that NSF fellowships be granted solely on the basis of ability, and to provide in lieu thereof that they be awarded on the basis of character, ability, and loyalty to the United States and its constitutional form of Government. In addition, the bill would amend section 16(d) of the Foundation Act, which requires the execution of a disclaimer affidavit and the oath of allegiance to the United States before any payments may be made under any fellowship, by also requiring that the affidavit provide information as to whether the individual has ever been a member of, or supported, any organization cited by the Attorney General as subversive and whether he has ever been arrested, charged, or held for any violation of Federal, State, county or municipal law, regulation or ordinance, other than a violation committed before age 16 or a minor traffic violation.

I believe at the outset I should make clear the position of the Foundation with respect to the provision of Federal funds by the Foundation to disloyal persons because I feel there should be no misunderstanding on this score. For some years we have been on record with respect to this matter and I would like to repeat here the position taken by the Foundation in 1956 on the support of scientific research by the Foundation. At that time the Foundation issued a statement, endorsed by the White House, which read as follows:

The National Science Foundation, in appraising the merit of a proposal submitted by or on behalf of a scientist for the support of unclassified research not involving considerations of security, will not, on the basis of unsupported charges, pass judgment on the loyalty of an individual. In making a grant, it will be guided as to an individual's experience, competence, and integrity by the judgment of scientists having a working knowledge of his qualifications. However, the Foundation does not knowingly give nor continue a grant in support of research for one who is:

1. An avowed Communist or anyone established as being a Communist by judicial proceeding, or by an unappealed determination by the Attorney General or the Subversive Activities Control Board pursuant to the Subversive Activities Control Act of 1950, or anyone who avowedly advocates change in the U.S. Government by other than constitutional means, or

2. An individual who has been convicted of sabotage, espionage, sedition, subversive activity under the Smith Act, or a similar crime involving the Nation's security.

3. Furthermore, if substantial information coming to the attention of the Foundation indicates that a potential or actual researcher might be guilty of violation of any such law, the information will be forwarded to the Department of Justice for its consideration.

This has been in effect since 1956, as I said, with the support of the White House and this indicates the general philosophy of the Foundation with respect to providing Federal funds to research or even to fellowships and is really the background of what I was saying at the last hearing.

With respect to fellowships, the Foundation believes that execution of the affidavit and oath by any such person would raise a serious question with respect to the validity of the affidavit and oath executed by him and, therefore, with respect to the legality of payments to him under a Foundation fellowship.

The amendments to the Foundation Act proposed in H.R. 7806 raise considerations which we view with deep concern. The proposed amendment to section 10 would require the Foundation to consider the necessity of investigating fellowship applicants on a substantial scale. Moreover, in any case where a question arises with respect to the character or loyalty of an applicant, the Foundation would be required to make essentially judicial determinations which are inappropriate for such an agency. The advantages to be gained from this procedure, we believe, are far outweighed by the unwarranted implication that applicants for National Science Foundation fellowships belong to a class which should be viewed with more care than other citizens of the United States receiving Federal funds. The National Science Foundation believes that it can operate effectively within the framework of the legislation which now exists. We do not, however, wish to be placed in the position of being required to pass upon unsubstantiated accusations. The National Science Board at its recent meeting on June 29 considered this matter very thoroughly and adopted principles along the following lines:

The Foundation has always judged that, in addition to intellectual ability, qualifications for a National Science Foundation fellowship include motivation, independence and objectivity of judgment, accuracy, and integrity.

Further consideration of this matter has led to the conclusion that conviction of a crime is a factor to be taken into account in judging that individual's qualifications for a National Science Foundation fellowship.

It will, therefore, be the policy of the Foundation to include on the application form for any Foundation fellowship a request that the applicant list any conviction for violation of any Federal, State, county, or municipal law other than a minor traffic violation. In this way, the Foundation will have additional information which can be taken into account in obtaining a total picture of the applicant's qualifications as compared with others requesting awards in a particular fellowship program.

We also object to that portion of H.R. 7806 which would require the applicant to provide information on whether he has ever been a member of, or supported, any organization cited by the Attorney General as subversive since adjudications would be necessary. As you know, it has been held that, under the criminal sanctions of the Smith Act, membership must be active and the individual must know that it is the purpose of the organization to forcefully overthrow the U.S. Government.

Therefore, upon learning of membership, the Foundation would be required to make a determination as to whether or not the individual knows the purposes of the organization, assuming that these are ascertainable.

With respect to information about crimes, as I indicated earlier in my statement, the Foundation plans to require that the applicant specify the nature of any conviction for violation of a law other than a minor traffic violation. We believe that this information should be limited to convictions and should not include arrests or charges since they are not proof of the commission of any crime.

Our objections to the legislation, therefore, rest upon two primary considerations:

1. Those portions of the legislation which require determinations based on unsubstantiated accusations, as distinguished from convictions, we feel, are inconsistent with the mission of the Foundation and cast an unwarranted reflection upon persons applying for Foundation fellowships.

2. The factual aspect of the legislation, such as evidence of conviction of crimes, can be taken into account, we believe, under our existing legislative authority.

We, therefore, feel the legislation is undesirable and recommend against its enactment.

It would be my hope, Mr. Chairman, that the committee would feel in taking a position in support of this outline in the statement I have made that would serve the purpose excellently well and would be the best solution to the problem.

The Bureau of the Budget advised us that it has no objection from the standpoint of the administration's program to the submission of this report, which was worked out in connection with the White House staff.

The CHAIRMAN. We want to thank you for your report. It does further explain your position than did your last interview with this committee. I want to say for the benefit of the members of the committee that I asked counsel to prepare this bill, and I think Mr. Ham-mill has done a very excellent job. I want him, at a later moment, to explain the provisions of this bill. Before doing that, however, I want to call to the attention of the members of the committee and to Dr. Waterman the fact that on page 57 of the transcript of Dr.

Waterman's testimony he said that the National Science Foundation was not able to take into consideration anything but the scholastic qualifications of the applicant applying for a scholarship or a fellowship. And he said it again in response to some questions Mr. Fulton asked him on page 57; Dr. Waterman is replying:

I am not evading your question. I just want to lay the groundwork for the answer. These seem to be the facts. Now the affidavit seems to take care of that.

And Mr. Fulton says:

With respect to the Yellin case, under the present procedures would the result be the same? I just ask you to say yes or no and then I will develop what the procedures are.

And Dr. Waterman says:

As we read the act, there is no other interpretation we can make unless any evidence we have bears on the ability of the candidate because those are the terms laid down.

Mr. Fulton then makes this observation:

So that your complaint really is against the authorizing act because it forced you, in the Yellin case, to come to the same result regardless of your own discretion and judgment.

And Dr. Waterman said, "I believe so."

That is only one instance. There are a number of other instances where the good doctor, and he is a good friend of mine, made the same observations, that he thought he was bound by the terms of the act to restrict his inquiry into the qualifications of the individual applicant and couldn't take other things into consideration. The staff calls my attention to page 73 where I said:

But you construed the authority under the law not to give you the authority to put restrictions other than the ones that you have indicated on the admission of candidates.

And Dr. Waterman answers:

I would think we would have to abide by the law as it stands. We could alter that.

I think we have any number of instances in the record. I am sure the members of the committee would recall them. Another one counsel calls my attention to in reference to a question by Mr. Karth:

Doctor, the reason I suggested that you answer these questions is that it seems to me some time ago in answer to one of Mr. Fulton's questions when he asked whether or not if the facts about Mr. Yellin had been known about him prior to the granting of the fellowship, would you, in your opinion under the law, still have been compelled to grant him the fellowship. It seems to me that your answer was yes.

And Dr. Waterman said:

Yes, but, of course, this would depend upon how this was regarded by the letters that dealt with it. If they say frankly, the man had been convicted of contempt, but they knew him and they felt that he would have turned over a new leaf—

and then he is interrupted there by Mr. Karth again who said:

Well, whether or not this information had been in any letters, let's say, that it was of personal knowledge to you, then because of the maturity and stability requirements involved in this in addition to scholastic ability, it seems to me that your answer probably should have been "no" instead of "yes" or certainly could have been "no" instead of "yes" under the law.

And Dr. Waterman says:

Under the law, it would seem to me since we are judging by ability we would have to take the evidence in due course from the people who wrote the letters of recommendation if they felt—

and so forth—this is all the way through in the testimony and that is the reason why after the hearing, I asked counsel to draft some provision to submit to the committee. That bill is what is before us this morning.

As I understand your statement, Doctor, you state you will include in the application form for any Foundation fellowship a request that the applicant list any conviction of violation of any Federal, State, or municipal law, except minor matters.

Dr. WATERMAN. May I answer your uncertainties about the testimony? I want to make very sure, and I think you will all realize this, wherever I talked about the authority of the Foundation, I said it had to be related to the ability of the Foundation. Right through the whole testimony I kept saying we can take into account anything that relates to ability. So I tried to establish that very thoroughly because that is the way the law reads.

I also said that when you say ability you mean integrity and accuracy of observation, these things that I have now stated. The only difference now in the point of view after having been discussed by the Board is the explicit statement now that we believe we should take the conviction of crimes into account in this determination of the candidate's ability. The Board really feels this is logical.

The CHAIRMAN. You do not state that that would cover applications for scholarships but merely fellowships.

Dr. WATERMAN. We have never made any scholarships but we would include that too. We have never granted any scholarships.

The CHAIRMAN. You would have at least a record there in the application of convictions of any type of serious crime?

Dr. WATERMAN. Yes. We just didn't think of putting scholarships in.

The CHAIRMAN. What is the objection to putting in there a question asking an individual whether he is a Communist or not?

Dr. WATERMAN. Because it seems to me the oath and affidavit take care of that. If a man flatly says he is not, what more can one do?

The CHAIRMAN. You can ask him if he is a member of any of the organizations branded by the Attorney General as being communistic.

Dr. WATERMAN. I think the difficulty there, Mr. Chairman, is that the average person doesn't know what those organizations are. The number changes.

The CHAIRMAN. You could list those on the back of your application very well.

Dr. WATERMAN. This gets to be—well, it seems to go into details which are hardly appropriate if one has the initial overall statement. Then, of course, it leads us, as I said in my opening statement, to have to make a determination whether the person knows what the organization stands for, and whether he is a full member. This means we have to get investigations.

The CHAIRMAN. Doctor, you know that H.R. 7806 was patterned after form 57 of the Civil Service, and that the Civil Service Com-

mission submits the same type of application to every individual who wants a job with the U.S. Government.

Dr. WATERMAN. Yes.

The CHAIRMAN. They don't feel there is anything wrong in asking an individual these questions.

Dr. WATERMAN. It seemed to us when we had that in mind that in the Civil Service Form 57 one is interested in determining whether the individual will be a loyal and trustworthy employee of the Government. That is a rather serious undertaking, so the Government has to determine very carefully whether he can take responsibility such as he would have to as an employee of the Government. But a fellowship is in a different category. This is a temporary thing. Perhaps general counsel could add to this?

Mr. HOFF. I would like, if I may, to make a few remarks casting back over my experience since I have been in the Government. I do feel that a fellowship applicant is quite different from a Government employee relationship. Furthermore, if we were to get a list that a fellow, fellowship applicant belonged to we would be up against this type of situation: Without naming the particular organization, there was an organization on the Attorney General's list which I am sure was a Communist front organization. Nevertheless, it had an office in Washington here, and without holding myself to the exact figures, the arrangement was something like this, that there was a big sign up in the window, "A dollar discount on records to members. Membership \$1." Lots of people went in there and paid their dollar for membership and then bought three records and went out and were \$2 to the good and had no idea of what they had done. When I came to Washington in 1948 in working for another organization we found that these fellows were members of the organization and we were up against determining what kind of membership. At that time we did reach an agreement that in effect is the present agreement, that it had to be some sort of a knowing membership. This goes all through the situation. We just couldn't in all good faith judge people on the basis whether they had given \$5 to the Spanish Loyalists, Abraham Lincoln Brigade, all sorts of things that have been on the list from time to time, without having a careful investigation of the facts.

I for one feel very strongly, partly I suppose because I would be personally involved, that this type of agency simply cannot make a determination as to whether somebody did this with bad intent or with full knowledge or just carelessly and for entirely praiseworthy reasons. This is why I personally feel very strongly that unless we rely on court convictions we are just in a morass of trying to sort the good people from the bad.

The CHAIRMAN. Of course, the Yellin case was one where you had a court conviction and affirmation on appeal.

Mr. HOFF. There is no question about that.

The CHAIRMAN. Yet bringing your case in mind there, your organization would merely be called on to find out whether or not a contribution to the Abraham Lincoln Brigade in Spain would justify refusing a scholarship. How does the Civil Service Commission work that when they make that determination?

Mr. HOFF. This is very hard—

The CHAIRMAN. For instance in reference to yourself, how did they pass on you?

Mr. HOFF. I wouldn't like to comment on that. But I have been advised that there are just enough loyalty board hearings, agency hearings to say that this is a very troublesome thing, and they have gone on for months, and months and months. We have sent our interrogatories, gotten back answers, and it is really in my personal opinion impossible for this type of an organization on any mass scale at all to determine the basis on which these unsubstantiated facts really affect a person's true loyalty.

The CHAIRMAN. Would you think that a person like that should be employed by the U.S. Government?

Mr. HOFF. A person like what, sir?

The CHAIRMAN. Persons to whom we refer here, for instance, a Communist—

Mr. HOFF. This is the question—

The CHAIRMAN. I don't mind telling you in advance what I am going to ask you. If it is so troublesome, how does the Civil Service work it?

Mr. HOFF. As I was saying, there is an investigation originally through the FBI and more recently through the Civil Service Commission itself. This takes months and months. After the investigation, what is even more troublesome is that you have these undigested reports, and it is almost impossible to come to any clean conclusions. But where it is applied to a Government employee I think there is an entirely different type of thing. We are dealing with security there. We are not dealing with security in this case. When you are dealing with security it seems to me it is a much easier thing to put the burden of proof, if you will, on the applicant. But I don't think that we are entitled where somebody writes in a letter and says "So and so belongs to a subversive organization," on that fact alone to brand him as disloyal by not giving him a fellowship.

Mr. MILLER. Isn't it true that the Civil Service Commission is generally way behind in its investigations? I know it was some years ago, that they were a year or so behind and they were always pleading for money for more investigators to try to bring their load up to date.

Mr. HOFF. I don't know how far behind they are now. In the past they have been so far behind that people have not taken up the Government employment that they had arranged to take because the time elapsed and they had gone on to something else.

Mr. MILLER. In many cases people went to work and then they were to be investigated and they have never come up with an investigation because they are so far behind. I served on the Post Office and Civil Service Committee and this was the great problem that we always had. Maybe it is corrected now because this was 8 years ago. But up to that time, shortly after the law went into effect we had a long fight. And then we had a long fight in the committee as to whether the FBI or the Commission itself should set up the agency to do the investigation. The FBI came out very flatfootedly that it did not want to do it. I have a letter of commendation from Mr. Hoover because I took his recommendation on the thing. The Commission set up their own investigative agency, and then if they bumped into anything, they called the FBI in. The screening is done by people within the civil service and they are way behind as far as I know.

Mr. HOFF. So is the FBI if you rely on them.

The CHAIRMAN. With the Civil Service you have a different proposition in this respect: As I visualize this, under the proposals of H.R. 7806 the application would merely be submitted to the university, the university then would pick out a qualified individual, which they do now, and ask him to fill out the application, and then when it is filled out they would look it over. If it looked all right on its face and they wished to do so, they would certify the application with a recommendation to you.

Mr. HOFF. Our applications are directly to us. And even in what we call the cooperative fellowship program the oath and affidavits come directly in to us.

The CHAIRMAN. That is what I say, your form would be in the university—

Mr. HOFF. No, sir. In the university, in their files—

The CHAIRMAN. You would have the forms like the form 57 printed up. You would send it down to the university that is interested in scholarships and fellowships, the university would single out a student and say, "You look like one we could really recommend, and here is a form; fill it out there." That is it. If he says on the form, "Well, I have been arrested, so and so." Then obviously the school would know that it shouldn't send it in to you.

Dr. WATERMAN. That is only one type of fellowship, Mr. Chairman, of the many we have. The others go directly to the individual.

Mr. HOFF. Furthermore, even in that type the individual can send it in directly. I don't think a university would want to take the position that somebody merely who had been arrested would be one that they would want to recommend. We are only dealing here with students who are accepted at very good graduate schools. They are accepted by the university. I would assume that if they are accepted they are willing to in most cases recommend them. A mere statement that somebody says he was arrested, I don't think—I don't think the university frankly would be willing to do it.

The CHAIRMAN. There is no requirement that the university turn it down. The university, if it does not think it is satisfactory, forwards the application with their recommendation to you. Then it is up to you to look it over and decide whether it is to be turned down.

Mr. HOFF. That is correct. We don't get university recommendations as such except in the cooperative graduate program where they do rate their candidates, but we have to do it on the basis of ability naturally and we take all the candidates whether the university has recommended them or not and judge them all together.

Dr. WATERMAN. That is the only one out of several programs we have, this cooperative one where the university enters the picture.

Mr. BASS. Mr. Hoff, are you familiar with the Attorney General's subversive list?

Mr. HOFF. Yes, but I haven't seen it very lately.

Mr. BASS. Would you tell this committee currently how many organizations are being listed?

Mr. HOFF. I would say about 70 on it just looking at the sheet. I am not sure of that.

Mr. BASS. Isn't it true that it is changed from time to time?

Mr. HOFF. It is changed all the time. What is more, it goes back quite a ways too.

Mr. BASS. It is true, of course, that under H.R. 7806 the applicant would be required to list information as to whether he now or ever has been a member of any of these. How could he possibly know whether or not he has been a member of any of these organizations either now or in the past?

Mr. HOFF. He couldn't know whether he was ever one that has been on the list in a time in the past. That is quite certain, or he might not know. He presumably might know of any that are listed currently. After you have got the listing what do you do with it? If somebody had been a member of the Washington Book Club does that mean he shouldn't get a fellowship? My whole plea is it is impossible to weigh this thing without really a judicial proceeding. You can't just say, "Were you? Yes or no." And then say yes or no to a fellowship.

Mr. BASS. I think, Mr. Chairman, this imposes an impossible burden on any applicant to know whether or not he has been on a subversive list now or back 10 years ago.

The CHAIRMAN. It is taken from form 57 which is used by the Civil Service. They are evidently doing the impossible.

Mr. BASS. I say the same for them.

Mr. FULTON. I agree with the chairman on that. Mr. Chairman——

The CHAIRMAN. Mr. Fulton.

Mr. FULTON. The problem comes up of establishing general rules by statute. But yours is a responsibility, Dr. Waterman, and my view of it is if you are given the responsibility you cannot have it without discretion. That means that you must have discretionary power, so that you can handle each of these cases as they come up, because the kind of a screen that this discretion must show, that a congressional committee can set by statute is a pretty rough screen. And it doesn't give a viability nor a leeway that you can take into consideration, the particular facts and circumstances surrounding an applicant. There may be justifications. There may be misleading—it may have been the applicant in his younger days having been enthusiastic over something he didn't fully understand. Or, for example, on many college students, they have high intelligence. They have good capabilities but they lack seasoned judgment. Under those circumstances you can't equate the ability in the learning process with judgment. I think that means there has to be a wide discretion given to you so that I think you should have full responsibility and therefore be given discretion as to the suitability of the applicant in considering the national aim of expanding the scientific capabilities and the scientists of this country as a group.

I think that we must give you power to make reasonable regulations as a Director of the National Science Foundation which you can adopt and you can amend from time to time. And that has to do with the failure to disclose material facts, for example, that you think are material, and that we by no stretch of the imagination on this committee could come up with. We couldn't tell you in advance what weight to give to various things. For example, there was a fact that I think was pertinent in the Yellin case that was not disclosed, and that was the suspension at one time of Yellin by the university. So that if we were outlining the things that should be requisites here I would likewise have in as a qualification suspension or dismissal from any

academic institution. That would have forced Yellin to disclose. This bill, H.R. 7806, doesn't go as far to require disclosure of this relationship in his academic record.

Then I believe that we need further the statutory statement that there shall be no property right, contract right, or employment right or right of any kind in law and equity in the applicant nor in the educational institution once the award has been made of the fellowship or the scholarship. I believe, likewise, the Director of the National Science Foundation, as the fellowship or scholarship advances, should have the right, in his full discretion, on circumstances that he thinks are reasonable and just, to withdraw or revoke, in whole or in part, the fellowship, scholarship, or the grant. That will give you a closer connection with it. Actually it would give you the authority to have a discretion that would prevent a man like Yellin proposing to sue the U.S. Government now for the grant which he claims was awarded to him under the statute. It likewise gives you the control along with the educational institution to see that the person is working at the job or the research program that has been entrusted to him. Under the present statute I don't see that you would have that right or authority.

I very gravely question, whether this committee acts on my motion giving you the reason for refusing to go ahead with the grant that you had once awarded, that you will, in court, under the strict interpretation of the statute, prevent Mr. Yellin from getting his fellowship. I feel that you must have a motion by this committee requesting you to hold up the actual delivery of the money to Mr. Yellin because, until further action by this committee, because of our construction of legislative intent, that it gives you a reasonable ground for withholding. My question is this: Would you like to have the power to make regulations within your own rules and regulations in the National Science Foundation? And secondly, Would you like a broader discretion rather than just us try to set the broad mesh of statutory selection requisites? If we set the basis of requisites, then we should give you the discretion on application, is my point. And thirdly, on the granting of the fellowship or scholarship to the applicant or the educational institution that there shall be no property right and that you shall have the right to revoke or reduce in whole or in part as it goes along. What do you think of those three things?

Dr. WATERMAN. I believe that our act does give us discretion now, Mr. Fulton, and what after careful study the board has concluded is we do have and that our outline of policy and procedures is as I have stated to you. Now, insofar as they thought this thing through we think this does give us discretion along those lines. It would be our hope that your committee would see it likewise because we do feel this would be entirely acceptable, at least as acceptable as one could make it—on property rights—

Mr. FULTON. Just 1 minute on that discretion. You see when you had answered my question on Yellin, had the facts been known to you in full, under the statute which provided that ability should be the sole test, would you still have had to give Yellin the fellowship, and your answer was yes. That to me showed a limitation of discretion by statutory provision. And your comment to me very adequately was, "Yes, our trouble was with the statutory provisions." I felt that we should do something to help remedy that.

The question with me is, why not give you the power to codify your discretion by regulations. Before you leave the point of discretion. Why don't we give you the power to make regulations?

Dr. WATERMAN. May I just answer one question, in my answer to your question, Mr. Fulton, I think I tried to answer it about three times, always trying to say we would take the facts into account if they related to ability. My final answer intended to have that in too. If it is not in it should be.

I think we have to stand on that. You understand, of course, I was answering, since you urged me to, without having brought the matter to our Board, which I have to do in policy questions.

Mr. FULTON. We want to feel you have the full discretion, I am sure, or at least I do, because you are given the full responsibility. I had pointed out an example that the Bobby Frank murderers were geniuses, that crime has nothing whatever to do with their abilities. Everybody admits they were the strongest type of ability. And even today the survivor is very able to do research and development or professional work. He has complete ability.

Dr. WATERMAN. That takes a very narrow view of ability. I didn't accept that from the standpoint of ability.

Mr. FULTON. If it is going to be on the basis of ability so that you can't keep a Yellin out, then it becomes impossible for us to set a point of decision as criteria for you so that you can decide which side of the line a man like Yellin is. Unfortunately my point of decision on the Yellin case was a different one than yours. We must make the rules of decision that are broad enough that you then can make the decisions with ample discretion. I have felt you had complained that the statutory provisions were so restrictive that it did restrict your discretion. I don't say how much, but it held you in.

Mr. BASS. Would you yield?

The CHAIRMAN. Will you yield?

Mr. FULTON. To the chairman.

The CHAIRMAN. I will say that H.R. 7806 merely requires the bringing out of the facts and does not direct the National Science Foundation how to adjudicate. It does do this: It requires consideration of character, ability, and loyalty. But it does not direct the National Science Foundation to adjudicate one way or the other. It does require the bringing out of these facts so that they will be known before the Foundation passes judgment on giving out public funds.

Mr. FULTON. May I comment on the chairman's statement? When we strike out the words "solely on the basis of ability," in the second sentence and insert "In lieu thereof on the basis of character, ability, and loyalty to the United States and its constitutional form of government," we are broadening the concept of discretion. My comment has been to give you the method of using your discretion in formalizing form through regulations based on reasonable judgments, that then as a, as much a guide to the applicant as they are, guide to the person who is administering in the National Science Foundation on the screening of the particular applicants. You won't be able to screen them you see. That is why I feel within the National Science Foundation that you do need regulations on this.

Mr. BASS. Would you yield on that point?

Mr. FULTON. I would rather finish the colloquy on that. Would you comment on that? Regulations as a help to you is what I am trying to—

Dr. WATERMAN. If the requirement was broadened to include character, loyalty and ability, we are convinced this would lead us into what would be adjudication and on very troublesome matters, too. Character is a very difficult thing to determine. If we had to take that into account explicitly our opinion is that this would be a requirement, and I think the loyalty should be taken care of by the oath and evidence. The real question, it seems to me, is with the present interpretation as I have given it to you. Why doesn't this do the same thing in matters that count and do it in such a way that we are not required to make adjudication or findings which would be inappropriate for an agency whose function is not that.

Mr. FULTON. Do you now feel that the present statutory language limits your discretion in any way? If so, how does it?

Dr. WATERMAN. Not in essential ways.

Mr. FULTON. Then how does it limit your discretion?

Dr. WATERMAN. We are talking about—in talking about the ability of the candidate in our present interpretation, this includes the factors that I mention, his motivation, accuracy of judgment, and observation and integrity. Those are the things we require.

Mr. FULTON. Under the present view of the statute as distinguished from when you were here previously and opening it up, because I could see there could be a change of policy when you consulted with your people in the National Science Foundation, would you still feel that in the Yellin case you would be restricted so that as you had answered previously, even though you had known all the facts the decision in the Yellin case would be the same?

Dr. WATERMAN. Not necessarily. I do think, to answer the first part of your question, we would have all the facts to deal with.

Mr. FULTON. You would have the facts to deal with the Yellin case?

Dr. WATERMAN. Essential ones.

Mr. FULTON. The question is this: Does the present statutory language restrict you as you had previously said by the words "solely on the basis of ability," so that you would again then, under your present view of the language, be required to make the same reward to a person in the same circumstances as Yellin?

Dr. WATERMAN. I think that goes back to what you may recall in the previous hearing. I made a great deal of the point that a person cannot be a reputable scientist unless he is trustworthy. So by putting in the factor of integrity one takes this into account, to mention that one item.

Mr. FULTON. Does that mean then under your present view that you would not now give a fellowship to Yellin?

Mr. HOFF. I think what we are trying to say is—

Mr. FULTON. I think he should answer that.

Just answer it yes or no, and then explain.

Mr. HOFF. I don't think it can be answered yes or no.

May I have permission to answer in my words?

Mr. FULTON. I would rather have Dr. Waterman. You are a smart lawyer.

Mr. HOFF. Thank you.

Mr. FULTON. This is a matter of judgment. Whether Dr. Waterman feels that the present statutory language cramps him in his judgment. That is personal with Dr. Waterman. That is not his lawyer. That is the Director.

Dr. WATERMAN. I beg your pardon—

Mr. FULTON. How he feels about the present language. If he does, I am going to help him; if he doesn't, I am going to let it go.

Dr. WATERMAN. The director of an organization has to refer to his counsel in the interpretation of his act.

Mr. FULTON. I don't want to deprive you of your counsel and I wish you would confer and then give us your judgment.

Dr. WATERMAN. Would you permit the general counsel to answer this first?

Mr. FULTON. No, you better. It is your judgment that we are after. You are the Director of the National Science Foundation, and if you find no fault in the present statutory language—

Mr. DADDARIO. Mr. Chairman, I move that we suspend for an appropriate period of time so that he can confer with counsel.

Mr. FULTON. I want to do what you feel—

The CHAIRMAN. The gentleman has an observation.

Mr. DADDARIO. I move that we suspend for 5 minutes so that Dr. Waterman can properly confer with counsel, and then he can be in a position to answer this question.

The CHAIRMAN. I see no objection to that.

Let's suspend for 5 minutes and let Dr. Waterman confer with his counsel.

(Short recess.)

The CHAIRMAN. The 5 minutes are up.

Mr. Fulton, we have lost him during the recess. Here he is.

Mr. Fulton, you were recognized at the time of the recess.

Doctor, are you prepared now to go ahead?

Dr. WATERMAN. Yes, sir. Counsel confirms the reply I would have given, Mr. Chairman.

The CHAIRMAN. What is that reply?

Dr. WATERMAN. That is, that our act does not unduly restrict us in the first point.

The second is, if we had known the facts as we know them now, we would not have made the grant under the present interpretation.

Mr. FULTON. The next question then, of course, is: Do you need H.R. 7806 or any amendment to give you adequate discretion under the present statutory language in awarding fellowships and scholarships, grants under the National Science Foundation?

Dr. WATERMAN. The decision made by our Board is "No," very definitely, that we have the discretion we need.

Mr. FULTON. Your answer today is, then, you are against H.R. 7806 or any other amendatory acts because it is operating satisfactorily now and will in the future?

Dr. WATERMAN. Yes, sir.

Mr. FULTON. That is all.

Thank you.

The CHAIRMAN. Had you been apprised of the information regarding Yellin, you would have promptly turned down his application?

Dr. WATERMAN. That would be the answer, yes.

The CHAIRMAN. On the ground (1) that he was convicted of a crime, and (2) that—

Dr. WATERMAN. Facing a jail sentence.

The CHAIRMAN. And that he was a Communist.

Dr. WATERMAN. Facing a jail sentence.

Mr. FULTON. I had produced information to show prima facie during the period of 1955, 1956, and possibly 1957, on the application of Yellin to the steel company for employment he had said that he had worked as an electrician's helper in Lansing, Mich, and during the same period in the application to the National Science Foundation for his fellowship he had stated that he was then attending the City College of New York in New York City.

Have you been able to develop that prima facie statement that must have been acknowledged in the statement, first, the application to the steel company for employment as was brought out and shown in the Un-American Activities Committee hearing, and, secondly, the application statement to you on his application to the National Science Foundation for a fellowship?

What have you done on that?

Dr. WATERMAN. We would have to take that fully up with our Board if it reflects on his integrity, to find out what the facts really were.

Mr. FULTON. I had asked they be checked so we could find whether there had been a direct misrepresentation of a material fact by Yellin at the time he made his application for a fellowship to the National Science Foundation.

Have you or anybody on your behalf either in your agency or any other agency of the Government checked those statements?

Dr. WATERMAN. We just have the transcript. We didn't know that at the time you brought that to our attention.

Mr. FULTON. I believe it is material on the suit that Yellin is purportedly to enter against the U.S. Government to find out whether by fraud or deception or the concealment or the misrepresentation of the fact on his application, Yellin had mislead the National Science Foundation when they made the grant or award.

Have you checked to find whether you had made the award on a fraudulent misrepresentation?

Mr. HOFF. May I answer this, this being a technical question?

Mr. FULTON. Very glad to have you.

Mr. HOFF. As far as we can ascertain the facts before us are correct. His whole college record supports the statements as put in the application to us.

Now, the question of proving whether he lied at the time he applied at the steelmill is something that we are not in a position to do, and I think that Justice certainly could if a suit is brought, could establish the facts one way or the other.

Mr. FULTON. Why don't you ask the Justice Department to come in and check it for you?

Mr. HOFF. As far as our present action is concerned, it is not relevant because we have revoked it on the basis of the possibility of his going to jail.

We are in touch with Justice, and if any suit is brought or it becomes relevant in any other way, it certainly would be checked.

Mr. FULTON. A remarkable fact of the withdrawal reason given by you is that he would be unable to fulfill the terms of the scholarship because of not being able to be present in the laboratory or educational institution where he would be required to be; that is, on the ground of impossibility of performance. Is that not right?

Mr. HOFF. The possible impossibility, that is correct.

Mr. FULTON. You revoked it on a very narrow ground, which means that if Yellin on the appeal is then out on bail and not in jail, or if there is a remanding on the certiorari appeal to the U.S. Supreme Court for another trial, Mr. Yellin will then be on your ruling entitled to perform the fellowship. Is that not right?

Mr. HOFF. No, sir, we have revoked it. He will have to apply again.

Mr. FULTON. Then the question comes up as both the chairman and I have said, when he applies on these same facts again, does he get it?

Mr. HOFF. Then we will look into the facts and place them all before the Board for a decision.

In other words, under the statute we feel that those facts very definitely can be taken into account in weighing his right—whether we want to give him a fellowship.

Mr. FULTON. Won't his lawyer, if he is smart, say that you once awarded to him and that under the statute before the congressional committee Dr. Waterman as Director of the National Science Foundation said it was his judgment of the legislative intent that he would then have to award it to him again on the same facts?

Dr. WATERMAN. No.

Mr. FULTON. So that you are now changing your ground and he will then say:

Once having at a particular period of time conformed to the statute as the National Science Foundation then admitted, I am then entitled to it regardless of your belated judgment.

Mr. HOFF. There are two answers to that, Mr. Fulton. The first is a purely factual one, which is that each competition stands on its own, and the fact that somebody has been judged in one quality group or entitled to an award one year, has nothing to do with one the next year.

Mr. FULTON. Will you show me in the act where you revoke that?

Mr. HOFF. Revoke what?

Mr. FULTON. To revoke or suspend the grant or fellowship. What is the provision in the present existing language of the statute that gives you that power?

Mr. HOFF. We revoked it on the basis of after acquired knowledge, that if we had the knowledge at the time we wouldn't have given it. We think that is perfectly good.

Mr. FULTON. We are both lawyers. What is the statutory provision that gives you the power? Answer directly.

Mr. HOFF. I have to look at the statute.

Mr. FULTON. There is no power given to you in the statutory language.

Mr. HOFF. Not precise terms.

Mr. BASS. I would like to suggest a provision.

Mr. FULTON. We have different points of view.

Mr. BASS. You are engaging in a technical——

Mr. FULTON. We want to see what the language is because the statute may not be necessary.

Mr. HOFF (reading):

To prescribe such rules and regulations as it deems necessary governing the manner of its organization and personnel.

That is one.

Mr. FULTON. What section is that?

Mr. HOFF. Section 11(a).

Also the preamble to section 11:

The Foundation shall have the authority within available limits of appropriation to do all things necessary to carry out the provisions of this act, including but without being limited to the following.

I personally don't have any problem with our authority. If we do, we may find out——

Mr. FULTON. You take it from the general preamble provisions, and then once you have made the grant you say that you still retain the right to revoke or suspend in whole or in part through that general authority but through no specific statutory——

Mr. HOFF. It is tied in. Because the basis of the award was for a 9 or 12 months' tenure. If the facts later show that this is not necessarily possible, that gives us the right to revoke it on that basis.

In other words, this isn't just an arbitrary revocation. It is because we felt it didn't accord with the rules for the fellowship.

I would like to answer the other part——

Mr. FULTON. Before you leave the word "Rules." I am trying to get you to set rules.

Mr. HOFF. I think we handed them in last time. We unfortunately don't have the little booklet, which I will get for the record later, which provides the 9 and 12 months' tenure business. And also even in this one which I have here, which is the note that goes out——

Mr. FULTON. My last question, and I am through.

If a man is out on bail and there has been no decision against him so that he is presumed to be innocent until found guilty and he is then physically able to carry out the terms of the fellowship, would that be reason to withhold or revoke the fellowship?

Mr. HOFF. Out on bail? You mean before trial?

Mr. FULTON. Before any decision has been made against him in a criminal proceeding.

Mr. HOFF. This is something where I think that if there was a criminal proceeding and he was out on bail where the people——

Mr. FULTON. So he could perform the fellowship——

Mr. HOFF. Then you have to come back to what the people think about his integrity and everything else.

Mr. FULTON. Would that be a cause for revoking the fellowship, the fact that you got that information?

Mr. HOFF. I hate to answer that in generalities. I would like to see some specific facts——

Mr. FULTON. Just say yes or no.

Mr. HOFF. That is what I prefer not to do. I would like to answer the first question, Mr. Fulton, if I may, because Dr. Waterman has tried repeatedly to make clear that all through that, unless it affects

his ability, and I have forgotten exactly what your question was, but this goes to the first thing which I think is unanswered in the record.

The CHAIRMAN. If you had a postponed sentence by the Federal court, and the Federal court can postpone the imposition of a sentence, or if it was a suspended sentence, what would be the answer?

Mr. HOFF. Under our policy it is very clear we would take the conviction into account.

The CHAIRMAN. That would affect his ability?

Mr. HOFF. Might. This is something to be determined. It depends on what it is a conviction for.

The CHAIRMAN. It is the same conviction, but suppose a court now suspends that sentence, or defers the imposition of it. What about that? Would it affect your judgment?

Mr. HOFF. We have two different things, Mr. Brooks, which I would like to keep apart. One is what you might call the administrative determination of withholding or revoking a fellowship where somebody may not be able to fulfill the terms of it.

The second is taking conviction for a crime into account in judging his integrity. On this one, all we have been saying is that we can't answer these hypothetically, that each case would have to be considered, and the Board would have to determine whether it affects—

The CHAIRMAN. You have already passed judgment on this case. He would not have ability to comply in this instance. What I am trying to get at is this: Is that based on his inability because he would be in jail, or is it not?

Mr. HOFF. We are using "ability" in two different ways. I have been using ability in—we better not use "ability" to fulfill his tenure, and say he won't be in a position to fulfill his tenure.

In this case it has been revoked on the basis that there is a possibility he won't be in a position to fulfill his tenure.

The CHAIRMAN. Correct.

Suppose the court gives him a suspended sentence.

Mr. HOFF. Then we have to judge ability, and that is where all the facts would have to be put before the Board, and we can't answer—

The CHAIRMAN. You don't know what your decision will be in the Yellin case now if the imposition of that sentence is postponed?

Mr. HOFF. Except for the fact if he applies again, it doesn't get reinstated, he has to apply again. Then under the policy that the Board has adopted, the conviction would be taken into account.

The CHAIRMAN. If he had already completed his sentence—

Mr. HOFF. It would still be taken into account.

The CHAIRMAN. Then you don't know what you would do.

Mr. HOFF. It would be up to the Board. The statute will permit taking this into consideration.

Mr. KING. Let me pursue this one step further.

Suppose the Supreme Court were to reverse the conviction on purely technical grounds, so that the record still convinced you that the crime had been committed but for technical grounds the record was now expunged of the crime, but you are convinced that he committed it.

Mr. HOFF. I wouldn't be in a position to think he committed the crime if the Supreme Court said he didn't. I would only be in a position of knowing he refused to answer questions.

Mr. KING. The Supreme Court may have reversed it on purely technical grounds perhaps, perhaps going to jurisdiction of the trial court or something like that, which went to the matter of jurisdiction or something collateral to the commission of the crime itself.

Mr. HOFF. I can't really say that if the Supreme Court reverses, he stands convicted. I think we have to say he isn't convicted.

Mr. KING. You are convinced that the offense was committed.

Mr. HOFF. The offense of not answering questions, that is right.

Mr. KING. Now, what would be the attitude of the Board?

Mr. HOFF. I don't know. Here you have a question of whether the people who judge him, who know him, consider that he has done anything that affects his integrity or ability, it seems to me at this point.

Mr. KING. The facts are that it is quite apparent the man at some time in his life harbored some thoughts that were antagonistic to the U.S. Government.

Mr. RYAN. Will the gentleman yield?

Mr. FULTON. Would you yield to me?

The CHAIRMAN. I yield to Mr. King.

Are you through?

Mr. FULTON. Would you yield to me for a comment?

Mr. KING. I would like this question answered. If some others want to amplify the question, it is all right with me.

The CHAIRMAN. I have yielded to you. You can't yield to anybody.

Mr. KING. I have asked my question.

Mr. FULTON. Would you yield to me, Mr. King on your question?

The CHAIRMAN. Who wants to be recognized?

Mr. KARTH. I would like to pursue this point a bit, if I may.

Quite frankly, I think the statements made by Dr. Waterman and counsel are incompatible insofar as the answer of Mr. Fulton's question, again today, and then insofar as the answer to Mr. King's question.

I understood Dr. Waterman to say after a review of the Board and after consulting with counsel, if knowing all the facts that they know about the Yellin case today, that they would have denied the fellowship.

Is that correct, Doctor? Knowing what you know about Yellin today, had your Board made a decision previously you would have denied the fellowship that you previously gave?

Dr. WATERMAN. The fact is, he faces a jail sentence and therefore—

Mr. KARTH. He is not convicted yet?

Dr. WATERMAN. He is convicted and is facing a jail sentence unless it is overturned.

Mr. KARTH. If he wasn't convicted, then you don't know what you would do about this thing?

As a matter of fact, your Board, during the review has not made that determination?

Mr. FULTON. Would you hold for a technical point?

If the man's case is not decided on appeal, he is still innocent, even though a jury has found him guilty. Until the final appellate court has said this is the end of the case, the man's conviction is not relevant because you can't really tell whether he is guilty or not, until the upper court has decided.

I must say, as a practical matter, it is refreshing to find the National Science Foundation saying that conviction of contempt of Congress is not, in and of itself, disqualifying for a National Science Foundation scholarship.

The CHAIRMAN. I don't know whether the doctor would like to amplify his answer on that.

Mr. BASS. I don't think he said that.

Mr. HOFF. I don't think we quite said that. I think what we said is, "We can't list all the crimes that will automatically bar somebody."

The only way we can answer that is: conviction for a crime has got to be considered, and the Board has to decide.

Mr. FULTON. You still have to go back to your Board and look over Yellin again, regardless of the contempt of Congress conviction?

Mr. HOFF. That is the way the Board has left it, something to be considered—

Mr. FULTON. That tickles me.

Mr. BASS. The questions I have in mind have been answered; namely, on the point of whether or not you have authority and discretion under the present act.

Section 11(a) does give you ample authority, and I just wanted to make that clear, and it has already been answered.

I would like to make this comment: I sympathize with Dr. Waterman and Mr. Hoff in trying to answer all these hypothetical questions in advance without knowing the full facts when you have a matter of discretionary action anyway to administer.

Mr. MILLER. I associate myself with your last statement.

I sympathize with them, too.

Dr. WATERMAN. As a scientist, it bothers me to have these hypothetical cases. One can't answer questions until they become real from a scientific standpoint.

Mr. BASS. I think you used sound judgment in not saying yes or no, whether you would grant a scholarship where you didn't know all the facts.

Mr. HECHLER. As I understand it, on your testimony, Dr. Waterman, top of page 4, you think the application should also include a request, the applicant list any conviction for violation of any State, county, or municipal law other than a minor traffic violation.

This disturbs me a little bit because when I was 17 years of age, we had up in New York what is known as a junior operator's license. We had a Junior American Legion baseball game. I was driving the team home after sunset in violation of the law, and some pretty girls were walking across on the other side of the street, and my attention was diverted a little, and the car ahead of me stopped and I rammed into him and it happened about 50 feet from a police station.

A tremendous turbulent crowd gathered and a policeman said, "There is nothing I can do but cite you for this." It was not a minor traffic violation. I was not under 16. My license was revoked. I was fined. It was a major court case.

I don't say maybe I shouldn't be ruled out for a National Science Foundation fellowship on that basis, but extensive research on the part of my opposition up to this point has failed to reveal this.

So in 1962 it may be a major issue in my campaign.

My point is simply this:

A thing like this, if simply listed on the application and if taken into consideration, as you say here, in judging qualifications, gosh, if anybody saw that, they would immediately decide that this criminal should not get a fellowship.

I raise a question whether this requirement should be in your application.

Dr. WATERMAN. We don't, of course, draw any conclusions from this, only that we take the matter into account.

The CHAIRMAN. All this bill would do would be to require you to say that occurred.

Mr. HECHLER. The mere fact of stating it, I would think, would brand me as a criminal.

When you say take into account, what disturbs me is in taking it into account under your present rules and regulations, the facts concerning Mr. Yellin, it disturbs me that you were not able to identify these sufficiently to revoke the fellowship, I mean, to refer the fellowship.

This is what disturbs me about this whole issue.

You still think, though, that this business of violation of Federal State, county, and municipal law should be included on the application?

Dr. WATERMAN. Applying it to the present case, this wouldn't ever arise, even if he had been required to state these, or else we would get him for perjury.

Mr. HECHLER. That is your possible argument for including that on future applications?

Dr. WATERMAN. Yes.

Mr. HECHLER. I merely would like to add to the chairman's initial observation that I appreciate your position on this. I appreciate the loyalty and contribution which you and other scientists have made to our national effort.

I hope through these hearings that we have held it will clarify the procedure and position which the National Science Foundation can take in the—

Dr. WATERMAN. It has been very helpful, as I have said before.

Mr. HECHLER. I would like to add one other observation in line with my colleague, Mr. King's questioning, that even though I am not a lawyer, myself, I am a little disturbed by the reaction which your counsel had to Mr. King's question concerning a case where the Supreme Court throws something back on a pure technical matter of jurisdiction.

It would seem to me that even though the man has not formally been convicted, that there is sufficient question concerning his ability to cause the Foundation to pause.

Mr. KING. Would the gentleman yield enough for me to associate myself with your comment?

Mr. HECHLER. Would you care to comment on that further, Dr. Waterman?

Dr. WATERMAN. I think our position as we established it on this coincides with what Mr. Hoff said, General Counsel. I don't think we could add anything more.

Mr. BASS. Isn't it true, Mr. Hoff, that if there is a conviction and the conviction has been appealed, still there is a conviction and the

applicant would be required to list that on his application form and you would be taking that into consideration pending appeal?

Mr. HOFF. That is correct.

We consider a conviction, after the first court convicts him until it is reversed.

Mr. BASS. I wanted to make the point the conviction stands and is in effect even though an appeal has not been disposed of.

Mr. HECHLER. As I understand your response to Mr. King's question, that you would not refuse to grant under such a situation; isn't that correct?

Mr. HOFF. What I said, Mr. Hechler, was that if the Supreme Court reversed for any reason, as a lawyer, I certainly couldn't consider the man was convicted. I cannot. This is one of the things that I feel very strongly in this whole matter, that I cannot set myself up to judge him merely because the Supreme Court reverses on one ground rather than another. They may have taken a narrow ground when they felt there was a broader ground. The Supreme Court will ordinarily take the narrower ground.

Mr. HECHLER. Would you automatically grant the fellowship under such circumstances?

Mr. HOFF. Let me just—let's just pin this down.

If we now know all we know in the present situation, if the—

Mr. HECHLER. That is not the question.

Mr. HOFF. We are talking about on the basis of our present knowledge—

Mr. HECHLER. No, I am talking about a hypothetical situation, which my colleague presented.

Mr. HOFF. Hypothetical extension of the present situation? Are we talking about the same thing? A hypothetical extension of the present situation?

Mr. KARTH. I think you are on the right track, Mr. Hoff.

Let's pursue the Yellin case here.

Mr. HOFF. The hypothetical case is that assuming the Supreme Court reverses this on the ground that something was not under oath or any other technical ground, would we then, if he reapplied, would we grant him the fellowship?

Right? Is that the question? This is what I think is very difficult to answer, because what we would have is if we get new references, all the people at his university who send in references would presumably know all the facts; he would then have to get in a high standing in the regular competition again, and then we would have the fact that he was not convicted.

That was the only point I was making.

But here is someone who refused to answer questions put to him by a congressional committee.

Let me show you the trouble I have, and I hate to make this on this particular case, because it makes it extra difficult.

Let's take another hypothetical case. There are various rights under the Constitution. If somebody pure of heart pleads a congressional right and is convicted and the Supreme Court then reverses it for any reason whatsoever, who am I or we to judge whether he should really be convicted and didn't have a right—

Mr. HECHLER. Would you like to substitute the word "constitutional" for "congressional" right in what you said?

Mr. HOFF. Maybe I misspoke.

Mr. HECHLER. You meant constitutional?

Mr. HOFF. Yes.

This is the problem that you get into.

Mr. KARTH. You would not be compelled to automatically grant the fellowship.

Mr. HOFF. No.

Mr. HECHLER. That is what I wanted to pin down.

Mr. HOFF. His whole record, including his integrity and everything.

Mr. KARTH. You might not grant it; is that correct?

Mr. HOFF. That is correct.

Mr. DAVIS. Would the gentleman yield?

The CHAIRMAN. I started out recognizing Mr. Karth.

Mr. HECHLER. I yield back to the chairman.

The CHAIRMAN. I promised to recognize Mr. Corman.

Mr. CORMAN. I want to say that I would assume from the state of the hearings at the moment that we probably will not adopt H.R. 7806 today.

I would like to submit a proposed amendment which I have just drafted. I would not ask for action until it had been carefully studied, of course, but it seems to me it accomplishes most of the things we have discussed and also takes into account a substantial change which has been made by the Senate and recommended by the House committee for the National Defense Education Act.

The CHAIRMAN. Without objection, it will be made a part of the record.

(The amendment follows:)

[H.R. —, 87th Cong., 1st sess.]

A BILL To amend the National Science Foundation Act of 1950 to require additional information on the affidavit filed by each applicant for scholarship or fellowship, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That—

SECTION 1. Section 16(d) (1) of the National Science Foundation Act of 1950 is amended by inserting "(A) declaring" after "affidavit" and by inserting after "methods" the following: "—and (B) containing information as to whether he has ever been convicted of a felony, or is at the time of said application, subject to prosecution for any offense which may be punishable by confinement."

SEC. 2. By deleting all of paragraph (d) (2) of section 16 and by adding the following: "(2) No person may apply for or receive any grant, payment, or loan under this Act while he is a member of the Communist Party or any other organization having for one of its purposes or objectives the seizure or overthrow of the Government of the United States, or the government of any State or political subdivision thereof, by the use of force or violence, and has knowledge of such purpose or objective of that party or other organization.

"(3) No person who within five years has been a member of the party or any other organization of the kind referred to in paragraph (2) may apply for or receive any grant, payment, or loan under this Act unless his application for such grant, payment, or loan is accompanied by a written statement, executed under oath, containing a full and complete disclosure of the facts concerning his membership in that party or other organization and the knowledge possessed by him during the period of his membership therein with regard to the purposes and objectives thereof.

"(4) Whoever knowingly violates paragraph (2) or paragraph (3) of this subsection shall be fined not more than \$10,000, or imprisoned not more than five years, or both."

SEC. 3. By adding after section 16(d) of the National Science Foundation Act of 1950, the following: "(e) All recipients of scholarships or fellowships who shall have access to any classified information shall be subject to the same statutes, rules, regulations, and orders as are applicable to Government employees having such access, plus such additional regulations as shall be deemed by the Atomic Energy Commission, the Secretary of Defense, or the National Science Director, to be in the interest of the national security."

MR. CORMAN. It deals with precisely the same section of that act that we are discussing here.

I do not know whether their conclusions are correct or not, but I think it would be well for our committee to review them to ascertain whether or not we want to make a similar change.

It has to do with section 16(d) and deals with the disclaimer of affidavit.

It is the recommendation of the House committee and of the Senate committee that the disclaimer affidavit be replaced with a stronger anti-Communist provision.

The reading I have done up to this point convinces me it is a tighter, more effective provision, and I think perhaps we should have it in our law, too.

I think that the National Science Foundation Act is more closely akin to NDEA than to the civil service employment situation, and for this reason we should study it further.

The first section of my proposed amendment would, I believe, close the door through which Yellin entered and still not offend Mr. Hechler, who once had trouble when he was 17, because it provides that one must list all of the felonies of which he has been convicted and adds additionally that he must disclose at the time of said application whether he is subject to prosecution for any offense which may be punishable by confinement, which would certainly disclose the possibility of inavailability.

Section 2 I have copied precisely from the new NDEA provisions, which I say it seems to me are much more effective than the disclaimer affidavit, and I think have less of the objectionable parts of the disclaimer affidavit insofar as the academic community is concerned.

Section 3 is the one on which I have the least amount of information, and yet it seems to me this committee should review.

It has to do with those people involved with fellowships and scholarships who favor access to classified information.

I do not know for sure whether they are subject to the same kinds of rules and regulations as are provisions of the Federal Government. If they are not, they should be, in my opinion.

And further there may be even need for additional security regulations that involve students studying under Federal grants, and for this reason I have put it in for the comments of those who may eventually study it.

I do feel that the statute at least needs careful review, and the House Education Committee, it is my understanding, has recommended their change based on extensive hearings over the last 2-year period.

I am not in a position to say of my own knowledge whether the workability of their proposed change is better or worse than the present existing disclaimer affidavit. I would like to see us review it

carefully, make our own independent decision concerning it. And if it is a more workable provision, we would want to have it in the National Science Foundation awards as it apparently will be in the NDEA—

The CHAIRMAN. I suggest that you give that to counsel and we will ask counsel to have copies made to give to the members of the committee for their study.

I promised to recognize Mr. Randall.

Mr. RANDALL. Just one or two questions, Doctor, along the lines of Mr. Hechler's inquiry.

I notice at the top of your statement, which I missed, you said, "list any conviction."

Now, it has been suggested that this amendment should list whether he has ever been arrested, charged or held for any violation of Federal law.

Do you believe that is going too far, the wording of the statute, and should require only the convictions; is that your point?

Dr. WATERMAN. That is correct.

We feel the Government employee is a different matter than being awarded a fellowship.

Mr. RANDALL. Unlike Mr. Hechler, I was charged with reckless driving and acquitted in open court.

Along the lines of our colleague, Mr. Fulton, in which the point was never pursued, maybe your counsel would want to consider this, but this suit which is pending, and I am not familiar with all the details of it, it is just contemplated perhaps by Yellin, is that right, to enforce his rights?

Mr. HOFF. We have no indication that he is going to—

Mr. RANDALL. It is a newspaper story that he is going to sue.

Mr. HOFF. I haven't even seen that. This is purely hypothetical.

Mr. RANDALL. Basing it on a hypothesis, if a suit is generated here and does come, do you feel from your study of your present provisions under the section 10 or 16 of this act that there might or could be based on this previous decision to grant him a scholarship some sort of a vested right?

I think that is what Mr. Fulton is talking about. That we spell out specifically there be no interest, property right, that could be later enforced.

Do you feel there is enough wording in the present act to cover a situation of that kind?

Mr. HOFF. Yes, I think if anything more is needed, we could put it in our regulations under section 11.

The CHAIRMAN. I want to say the gentleman is asking some pertinent questions. However, may I interrupt for a moment?

The idea behind H.R. 7806 was largely based on this thought: Just ask for the information. If the man answers truthfully, then the problem is up to the National Science Foundation. If he fails to answer truthfully or withholds information, then under section 1001 of title 18 he can be punished for withholding or answering falsely.

If he withholds the information from a committee of Congress, it doesn't necessarily follow, but if he withholds information from you in your affidavit, he violates section 1001 of title 18 of the United States Code.

Mr. HOFF. That is correct.

The CHAIRMAN. That disposes of the matter, because in violation of that particular criminal statute, which is punishable by fine and imprisonment, I think it is 5 years imprisonment and \$10,000 fine, you can handle the situation.

Mr. HOFF. That is the same situation as we would have by requiring it under our own regulations; in other words, that will be subject to the same act.

The CHAIRMAN. What we want to do is get you to ask these people point-blank:

Are you convicted of a crime? Have you been arrested, and are you pending trial for a crime? Are you a Communist?

And if you get the answers, then the matter is up to you in considering the application.

Mr. HOFF. That is what we had planned to put on the application forms that are about ready to go to the printer now. They will have a question as to conviction for crime.

I think in view of Mr. Hechler's remarks—I would like to bring up one point, whether, in view of Mr. Hechler's remarks, we should give consideration perhaps to having that information separately so it could be held confidential.

The CHAIRMAN. It should be confidential until you consider it.

Mr. HOFF. I think we can take care of that and have it on a separate form so it will be held confidential.

Mr. HECHLER. Not have it out on a campaign.

Mr. RANDALL. You will provide the committee or put in the record these application forms as soon as they are available?

Mr. HOFF. The new ones? We will be glad to send them up. We can send them up on a confidential basis, just so they don't go out in general.

Mr. DAVIS. I would like to first state the background against which my question will later be put.

It strikes me that there has been a loss of perspective in many respects. Some of the answers seem to assume that all of the derogatory information that is known against a man consists of that which is a matter of public record, which isn't the case.

You know that one of the qualifications that an applicant should have is good character.

Another of the qualifications is ability.

Of course, another is that he be a loyal citizen or should be a loyal citizen of the United States.

Getting back to Mr. Fulton's premise of several minutes back, he observed that no person stands convicted until the adjudication of conviction becomes final. It isn't final until all avenues of appeal have been exhausted. Therefore a man out on bail, that would indicate of itself that the conviction was less than final; that an appeal still lies, because prisoners who are serving sentences cannot get out on bail. If they could, they would. You could count on that.

Another thing, I want to observe, though, in answer to Mr. King's question, if a conviction were set aside on some technical ground, such as maybe the venue was laid in the wrong county, if that should happen, your answer indicated that you would be forced to treat him as being innocent. I would like to point out that you are not. You still

have to certify and clear him from the standpoint of character. The fact of his having been tried would throw—I understand that you see my point—a while ago you made answers that went into the record which indicated that you could not then find your way clear to treating him as guilty of anything.

I say that you could. I still have to appraise his character whether he has ever been tried or not. It is up to you to give scholarships to persons of good character.

Let me point this out—I am still stating the background of my question—you no doubt have an applicant state where he is born. You no doubt require him to give the date of his birth, his sex, or her sex, height weight, age, all of those things.

I am sure you must do those things. They are relevant in your appraising every person for eligibility for scholarship. Am I not correct?

Mr. HOFF. Yes. I don't know if we have height and weight.

Mr. DAVIS. I would suggest that you ought to have it. You wouldn't want to have a person who was near death because of obesity or starvation. I suggest that the question in opposition to my distinguished and congenial friend Mr. Randall, in opposition to the views expressed by him and by my equally esteemed colleague Mr. Hechler, I believe a man ought to be required to say if he has been arrested. Not because that constitutes a black mark against his character. It doesn't. But because it gives you a clue as to something that might reflect on his character which you may investigate on your own resources. He could be a dope fiend, or something like that. You probably would not want to give a scholarship to a person of that kind.

The arrest wouldn't prove that he was. It would simply give a valuable aid to you in investigating as to whether or not he was.

I suggest that every questionnaire ought to elicit from every applicant a complete statement of his personal history. You are entitled to that.

Mr. HECHLER. Would the gentleman yield?

I would concur with this. I think this should be a basis for appraisal.

In your comments you constantly used the word "character." As I understand it, the word "character" is not within the basis of judgment of the National Science Foundation.

Dr. WATERMAN. Not at the present time. We prefer it not be.

Mr. DAVIS. Really? I was under a wrong impression. I would like to go on record as being strongly in favor of eliminating any applicant who might have been guilty of acts involving moral turpitude or involving disloyalty.

As to acts which may be legally classified as *malum prohibitum*, with which I am sure you are familiar, I think you ought to disregard those. The ones which are *malum in se*, which represents acts of moral turpitude, you ought to disqualify those without looking further, if somebody has been guilty of such action, whether or not they have been convicted.

Mr. HOFF. This, I think, gets to the heart of the matter. Maybe before you came in, we were saying at quite some length that the

difficulty is that we are in no position to sort people out on unsubstantiated charges.

Mr. DAVIS. You are in a position to sort them out as to who gets scholarships.

Mr. HOFF. Not on the basis of the statement that somebody said they didn't support their old mother.

Mr. DAVIS. You are under the duty of appraising them.

Mr. HOFF. I don't think that type—maybe that is a poor example, but I picked it. I think this opens up the floodgate—I am talking about character now.

Mr. DAVIS. Nobody holds a duty to his mother to support her.

Mr. CORMAN. We do.

Mr. DAVIS. That is peculiar in California. We all love our mothers. But I was trying to stick to concrete examples.

Mr. HOFF. Conviction is one thing. There has been due process, all the evidence has been adduced, and a tribunal has found him guilty. If we get something like, I don't know, I guess it is 15,000, 18,000 a year, and if we were to try to sort out all information of this type, let me put it in context, I think we have 500 or 600 employees in the Foundation, and getting up to close to 20,000 fellowship applications, we simply couldn't judge people's character.

Think how long it takes a court—

Mr. DAVIS. Couldn't you accept what they said on the application, knowing of the dire consequences that could be visited upon the applicant—

Mr. HOFF. Not merely if it were accusations.

Mr. DAVIS. Suppose a man is required to answer those questions knowing that later if he has answered falsely that—

Mr. HOFF. Correct on convictions.

Mr. DAVIS. I am not talking about that.

Mr. HOFF. The mere fact that he has been charged with something and maybe will be acquitted of it, or has been acquitted of it—

Mr. DAVIS. I daresay there would be a small percentage of those that would answer they had even been arrested.

Mr. RANDALL. I want to say my esteem of our colleague is mutual. I think he is a distinguished member of the committee. I wish to back him up in a matter here.

You specified a moment ago the word "ability" is used and you don't consider character. Was that—

Mr. HOFF. Only insofar as it is character that has some bearing on integrity.

Mr. RANDALL. I have been here long enough in this session to have heard the discussion of the matter of integrity. Isn't that a matter—

Mr. HOFF. There are some things that don't affect this kind of integrity and character, and others that do.

All I was saying was not on the question of conviction, because I think once you have a conviction, that is manageable.

Mr. RANDALL. You do consider integrity under regulations even though it is not spelled out in the statutes?

Mr. HOFF. That is correct.

Dr. WATERMAN. I made those points in my opening statement.

Mr. CORMAN. I would like to, since we are dealing with hypothetical cases, there are three of us who have been elected by our constituents which gives a similar quality in the Congress, and if we had to fill out an application similar to the one called for in H.R. 7806, one would have to yield a conviction, one an arrest, and I nothing; and if those three came to you with equal recommendations, what would you feel impelled to do in granting a single scholarship?

Mr. KARTH. Would the witness care to answer that question?

Mr. RANDALL. Put the acquittal in there, too, as well as the arrest.

Dr. WATERMAN. Our position I think as stated by counsel repeatedly is, we can't tell until we take the individual case.

Mr. CORMAN. It is for that reason that I feel very strongly that the necessary disclosure should be convictions only, on conviction of felonies.

Dr. WATERMAN. That is what we feel.

Mr. HECHLER. Do you have any further suggestions, Dr. Waterman, beyond what you have here as to how some of these cases can be flagged?

It occurs to me it would be not only impossible, impracticable, but also unnecessary and undesirable to have you review 18,000 applications.

I think the suggested amendment on which you testified would be bad. I agree with your testimony. But isn't there some way that you can get more information, shall we say, on your applicants, either through references, whether they be friendly or unfriendly, or through other means that can enable you to judge these applicants on the basis of ability in its broadest sense?

I think that is what we are seeking.

Dr. WATERMAN. Of course. And so are we, to make the best decisions we can.

I believe that this would be a very strong move in that direction. If, as we plan, the outline of how we are interpreting the list and listing of crimes on the application form went out with the instructions, then that means the reviewers, those who write letters of recommendation, will know what is expected and they will feel impelled to comment.

I would think they would take this into account. That is a confidential source.

Mr. Davis, you spoke about everything in the public domain. These letters of recommendation we do regard as confidential. Clearly you can't judge people unless you have that requirement in, that they be kept confidential. I believe this would have quite an effect on their opening up the subject.

Mr. HECHLER. Once again I think these hearings although extended on seemingly minor points, I think everybody is extremely helpful in clarifying this whole field.

Mr. KARTH. I would like to call to your attention and the attention of the committee, we have a conference report coming up on the floor immediately after the convening of the House. We do not have authority to sit.

Mr. Ryan says he has a statement he would like to put in the record. If you would like to do that at this time, Mr. Ryan, you go right ahead and we will have to adjourn to some later date and the staff will inform you when we desire to have you back.

Mr. RYAN. I would like to say I find the statement you submitted in committee this morning very heartening, Dr. Waterman. I think you have appreciated the very serious civil liberties questions which are involved in this proposed bill. I commend you for your statement here before this committee.

I would also like to submit for the record, Mr. Chairman, a letter dated July 12, 1961, addressed to me, from the American Civil Liberties Union, signed by Patrick Murphy Malin, executive director, which comments on the proposed amendments.

May I offer this and have it incorporated in the record? It sets forth the views of the American Civil Liberties Union upon the proposed amendment to the act.

Mr. KARTH. There being no objection, it is so ordered.

(The letter above referred to is as follows:)

AMERICAN CIVIL LIBERTIES UNION,
New York, N.Y., July 12, 1961.

HON. WILLIAM FITTS RYAN,
Committee on Science and Astronautics,
House Office Building, Washington, D.C.

DEAR CONGRESSMAN RYAN: We have received from Mr. Speiser, our Washington director, a letter from Mr. Stanley Newman of your office, asking for the American Civil Liberties Union's views on H.R. 7806. I should like to thank you for giving us this opportunity to comment on Representative Brooks' bill to amend the National Science Foundation Act of 1950 to provide additional criteria for selection of persons for scholarships and fellowships, and to require additional information on the affidavit filed by each applicant for scholarship or fellowship.

It would seem to us that striking out, from section 10 of the NSF Act, the provision that science fellowships shall be awarded "solely on the basis of ability" and substituting in its stead "on the basis of character, ability, and loyalty to the United States and its constitutional form of government" would in its implementation call for a full security investigation of every fellowship applicant. The ACLU has held that such investigations of Government employees are justified only in the case of those who work in sensitive areas. To extend them to the general run of scientists who apply for NSF fellowships would in our view be unwarranted and unwise. The ACLU recognizes that scientists wishing to work with classified material in sensitive areas, whether or not they are NSF applicants, must be investigated. Since this is and has been governmental practice, the proposed amendment to the NSF Act is unnecessary and would furthermore tend to defeat the very purpose of the act—which is to enable qualified scientists to push back the frontiers of science. Wholesale investigations of all applicants, who would have no assurance that they could counter damaging rumor and gossip by being allowed to confront informants, would be so distasteful a prospect as to dissuade an indeterminate number of able scientists from applying for fellowships. We know from the hard experience of the early fifties that many scientists refused to consider Government employment because of the onerous security investigations, which often left a cloud of suspicion as to the individual's loyalty. It is for this reason that the scientific community has sharply criticized the broad sweep of the Federal security program.

Should Government security agents, rather than the Foundation itself, be in a position to exercise a veto over the granting of fellowships, the Foundation would no longer be master in its own house. The program which it has carried on so effectively for more than a decade would be likely to suffer a serious setback and the Nation would be the loser. Furthermore, if the final evaluation of applicants were to be delegated to Government agents, rather than to the panel of scientists who serve the NSF, a dangerous step would have been taken toward governmental policing and control of the graduate programs of institutions of higher education.

The union likewise objects to the first part of the proposed amendment to section 16(D) of the NSFA. As it now stands, this section of the act requires every applicant for a fellowship to execute an affidavit that "he does not believe in, and is not a member of, and does not support any organization that believes in

or teaches the overthrow of the U.S. Government by force or violence or by illegal or unconstitutional methods," as well as the oath of allegiance to the United States. Representative Brooks' proposed addition would require every applicant also to declare "whether he has ever been a member of or supported any organization cited by the Attorney General as subversive."

Such an expansion of the disclaimer affidavit would render it even more objectionable than the union now considers it to be. The Attorney General's list, which dates back to 1947 and was last revised in 1955, has been shown to be in need of vast correction. A number of organizations still on the list either no longer exist or have programs which are irrelevant to the 1961 security problem. It should be recalled that the Supreme Court in *Wieman v. Updegraff* (344 U.S. 183, 1952) said that "mere membership" in listed organizations "in the absence of a showing of awareness of and willful participation in its alleged subversive purposes constitutes no valid basis either for denial of Government employment or even for deportation of an alien." Most recently, in *Scales v. United States* (29 U.S. Law Week 4581, June 5, 1961), the Court in upholding the membership clause of the Smith Act emphasized that it could be applied only against those individuals who held "active" and "knowing" membership in the Communist Party. The term "knowing" means that the individual had knowledge that it was the purpose of the Communist Party to forcefully overthrow the U.S. Government.

While the ACLU did not comment on the disclaimer affidavit when the NSFA was before Congress in 1950, we have repeatedly urged that the identical language written into the 1958 National Defense Education Act be repealed. We have not been alone in our opposition to a provision that makes the signing of a disclaimer affidavit a condition for the obtaining of loans by qualified college students. As many as 136 institutions of higher education have protested the disclaimer affidavit and to date 29 leading institutions have refused to participate in or have withdrawn, in whole or in part, from the NDEA student loan program.

The present Secretary of Health, Education, and Welfare, Abraham Ribicoff, and the former Secretary, Arthur S. Flemming, have both urged that the disclaimer affidavit be dropped from the National Defense Education Act. Secretary Flemming put the case quite properly:

"[This provision] will not uncover any persons who seek, or who belong to organizations that believe in or teach, the overthrow of the Government by force or violence. Such persons have no scruples about signing such an affidavit and taking such an oath. [The provision] will make it necessary for educators and students to go through a procedure that results in unnecessary expenditures on the part of the Government without making a contribution to national security."

While the NDEA provides for loans for a broad range of college students, and the NSFA for fellowship grants for advanced work in science, the ACLU sees no fundamental distinction. We believe that for the Government to condition the granting of either college loans or fellowships on applicants' beliefs or associations is to violate the first amendment and seriously to encroach on the academic freedom of institutions of higher education. President Eisenhower, it should be recalled, said in his budget message of 1960, in which he urged repeal of the disclaimer affidavit in the NDEA, "Our Nation seeks to foster a climate of freedom and creativity in which education, the arts, and fundamental science can flourish."

As to the concluding portion (B) of H.R. 7806, we urge that the sentence be rephrased so as to require from fellowship applicants sworn information, not on arrests, but only on convictions. As you know, a mere arrest is not proof of the commission of a crime which can only be adjudicated by a court. If this essential change were made, we would see no civil liberties or specific academic freedom objections to such a requirement. At the same time, in case it is added to the NSF Act, we believe that the foundation should evaluate the information disclosed and take the position that such an action as refusal on first amendment grounds to reveal beliefs and associations, as distinguished, for example, from perjury, should not bar a qualified applicant from receipt of a fellowship.

Yours sincerely,

PATRICK MURPHY MALIN,
Executive Director.

Mr. RYAN. I will furnish other members of the committee with copies.

Mr. KARTH. Dr. Waterman, counsel informs me it may be possible for us to complete these hearings beginning tomorrow morning at 10:30 insofar as you are concerned.

Would this meet your schedule?

Dr. WATERMAN. That would be all right.

Mr. KARTH. We could probably have the other business out of the way by the time you appear.

The committee stands adjourned.

(Whereupon, at 12:03 p.m., the committee adjourned, to reconvene on Friday, July 21, 1961.)

AWARDS OF FELLOWSHIPS AND SCHOLARSHIPS UNDER THE NATIONAL SCIENCE FOUNDATION ACT

FRIDAY, JULY 21, 1961

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE AND ASTRONAUTICS,
Washington, D.C.

The committee met at 10 a.m., pursuant to adjournment, in room 214-B, New House Office Building, Hon. Overton Brooks (chairman) presiding.

The CHAIRMAN. The committee will come to order. At this time we have invited Dr. Waterman back to answer any further questions. When we adjourned yesterday, Mr. Corman had just introduced a proposal for consideration.

It is my thought this morning if the committee goes along, we might hear Dr. Waterman a little further. I understand the Senate has under consideration a proposal, too, of a similar sort. Perhaps it follows Mr. Corman's bill very closely. But it seems to me that we ought to consider the approach of the Senate and also Mr. Corman's before we take any action on this matter.

If it is all right, we will hear the doctor, ask any further questions, and we will take action at a later date after counsel has been able to study the Senate approach on the matter also.

Doctor, will you have a seat, sir, with your counsel.

Doctor, in the meantime we had adjourned, have you had a chance to study the Corman bill?

STATEMENT OF DR. ALAN T. WATERMAN, DIRECTOR, NATIONAL SCIENCE FOUNDATION; ACCOMPANIED BY WILLIAM J. HOFF, GENERAL COUNSEL, AND CHARLES B. RUTTENBERG, DEPUTY GENERAL COUNSEL

Dr. WATERMAN. I have been handed a draft of it, Mr. Chairman.

The CHAIRMAN. Would you like to make any comments regarding it?

Dr. WATERMAN. It does clear up the points I think which have concerned us and this committee. I think it has considerable merit.

Our position is that with the act as it stands, as I have been explaining to the committee, this does cover the situation very well. The draft by Congressman Corman does provide specifically for the points which have been worrying all of us. So far as I can see at the moment, it does it very adequately.

The CHAIRMAN. Have you studied the Senate approach?

Dr. WATERMAN. No, I have not. I have known about it in a general way.

The CHAIRMAN. How would it differ from the Corman bill?

Mr. HOFF. I believe the chief difference, Mr. Brooks, is Mr. Corman's bill goes further in two respects: It requires the report of convictions, felonies, and also report at the time of filing an application if any charges are pending against an applicant.

It also goes further in the last paragraph, which stresses that if there is any security matter involved, that is an entirely different matter.

The CHAIRMAN. The separate approach is largely if an individual who is a Communist or belongs to a communistic organization makes application he is guilty of a crime and punishable, isn't that it?

Mr. HOFF. That is correct.

The Senate, as I understand it, is the same as section (d) (1) except for (b). It is the same as (d) (1) and the (a) part of it, leaving out (b), and (d) (2) and (d) (3) and (d) (4), and leaves off (e). This goes further.

The CHAIRMAN. It leaves off (e) then?

Mr. HOFF. Yes.

The CHAIRMAN. That is the only difference?

Mr. HOFF. (d) (1) (b) is also not in the second bill.

The CHAIRMAN. Yes, and (e).

Mr. HOFF. (d) (1) (b) and (e).

The CHAIRMAN. The approach made in the bill that I introduced here is largely one of eliciting from the applicant information who would know at the time of applying that the law says that anyone who withholds, conceals, or gives fraudulent information to the United States violates the law and is punishable by fine or imprisonment.

Mr. WATERMAN. Right.

The CHAIRMAN. That is largely the difference now.

I recognize Mr. Corman to ask any questions about his bill.

Mr. CORMAN. I would like to make a couple of comments. First of all, I think the specific Yellin case indicates that (d) (1) (b) has some advantage, in that it would make the Foundation aware of a potential unavailability regardless of the total ability of the person.

Subsection (e), it seems to me, may prove to be superfluous in that possibly the statutes which create regulations governing classified information are sufficiently tight. It would seem to me there is an advantage of putting it in here as the Congress is calling attention to the people who are making these awards, that we are particularly concerned about the handling of classified material by the people who may get the scholarships and fellowships.

I would not have any strong feelings if someone convinced me that the regulation is especially tight without that handling.

Dr. WATERMAN. I did have—pardon me.

Mr. CORMAN. I wanted to say the reasoning in my approach and I want to make it clear in the record that it seems to me we don't have enough information to know completely whether or not the Education Committee is correct in their approach on this business of eliminating the disclaimer and putting into the statute the affirmative provisions that it is a violation of the law for a Communist even to apply.

I do think there is great merit in the National Science Foundation and the NDEA being administered under identical law. I think it

would be a serious mistake for us to be giving approximately half of our scholarships and fellowships under one set of standards, and the other half under a different set of standards simply because they fall within the administration of two different agencies.

Obviously, the general objective of these scholarships is the same. It seems to me that this committee would serve a very fine purpose if we can refine this particular provision in the law and then see that it is adopted by all agencies that administer scholarships and fellowships. It does seem to me they are substantially different from employment, as such.

Mr. ANFUSO. Will the gentleman yield to me for a minute? Will the gentleman explain to me (4) (e)?

Mr. CORMAN. (e) is not under (4). (e) is a separate paragraph. In other words, (4) is under (d). It is (d) (1), (2), (3), and (4), and then (e).

Mr. ANFUSO. Will you please explain (e), then?

Mr. CORMAN. There was as a result of the *Yellin* case some general apprehension, I think, about the possibility, because of the rather loose checks made on students, of a Communist or Communist sympathizer or security risk, getting a fellowship, and then as a result of that having access to classified information.

Certainly it is true that these applicants for fellowships do not undergo the same kind of scrutiny, as such, that either employees of the Government or enlistees in the service would normally go through.

The purpose of that paragraph is to make certain that, separating the general question of fellowships from the specific question of classified material, those administering this program be made aware of the fact that we want to be certain that anyone who gets access to classified material is carefully scrutinized, beyond the point they are scrutinized in just receiving the fellowship itself.

As I say, it may prove with testimony from people who administer the existing law that this is superfluous.

Mr. ANFUSO. It goes beyond scrutiny, I think. It is rather broad. Is such a clause contained in any other law that the gentleman knows of?

Mr. CORMAN. No.

Mr. ANFUSO. The clause, "to such regulations, rules, and orders it shall be deemed by the appropriate agency."

They can come out with some fantastic rules and orders, I wonder whether it should be that broad. Is it really necessary?

Mr. CORMAN. As I say, I do not know. I put it in there, in part, because I would want the administering agency—

Mr. ANFUSO. The gentleman didn't take this from any other law?

Mr. CORMAN. No. It seemed to me a more reasonable approach to the problem than in a sense to relate it to employment and put in those kinds of regulations.

Mr. ANFUSO. I think it opens the door to abuse.

Mr. CORMAN. You get this question. Frankly, I don't know what the present attitude is to people who administer security regulations. I imagine their capacity is rather broad.

Mr. ANFUSO. Would the gentleman mind if we adopt—

Mr. CORMAN. I would urge that we listen to witnesses who can comment on the necessity and reasonableness of this. Maybe nothing is needed. Maybe different language is needed.

I for one want to indicate to the university and foundation that we are concerned about who gets hold of classified material.

Mr. ANFUSO. Dr. Waterman, would you mind commenting?

Dr. WATERMAN. I had intended to.

Mr. FULTON. Could I have a question on language before we go to Dr. Waterman?

Mr. ANFUSO. Would you mind letting him explain this?

Dr. WATERMAN. I had planned to do that.

In my experience both in my present position and others with the Government, this situation is very carefully taken care of. What happens, you see, is this, taking as an illustration one of our fellows: He is awarded a fellowship. Then he goes to an institution to study.

Now, he may at that institution have an opportunity to work researchwise on a classified project. If so, that classified project, in that classified project the university is bound to admit no one to work on it without full clearance.

This is contained in the original contract for which the project was made. So that he is not admitted to the project unless he is cleared fully, the regular security questionnaire, before he is allowed to work on it.

Mr. ANFUSO. You would say this language is really superfluous?

Dr. WATERMAN. It is not necessary.

The CHAIRMAN. Would the gentleman yield?

I would like to ask the counsel this question: How does the Corman bill meet your objections? Does it meet them satisfactorily?

Mr. HOFF. Yes. I think in a way, Mr. Brooks, it combines your bill in getting the information, and also the Senate bill in making the criminal penalty rather than the disclaimer affidavit.

The CHAIRMAN. Under the Corman bill you could print your applications, send them out to the schools, elicit the information which you wish to have, and which you need in passing on these applications, and do that all under the Corman bill?

Mr. HOFF. Yes, I think it would work.

The CHAIRMAN. You have no objection to the Corman bill?

Mr. HOFF. No, sir.

Dr. WATERMAN. I would have none.

Mr. McCORMACK. What is your procedure now when you get an application?

Dr. WATERMAN. For fellowships?

Mr. McCORMACK. What is your procedure now?

Dr. WATERMAN. Institutions know and individuals know that we have the fellowship program and the general type it is, because we send around instructions and announcements.

Then they have to fill out a questionnaire, an application form. That must be accompanied by letters of recommendation, which is then sent by the individuals to us.

Mr. McCORMACK. In their application do they have to set forth any offense they have been convicted of?

Dr. WATERMAN. Not at present. Our proposal is that they be asked to submit any crimes they might have committed.

Mr. McCORMACK. This proposal doesn't go that far, any crime. It confines itself to felonies. It doesn't state misdemeanors. There are some important misdemeanors.

Dr. WATERMAN. This does, however, have a clause talking about being charged——

Mr. FULTON. Would you yield?

On that point, Mr. Yellin was sentenced for a year in the Federal penitentiary for a misdemeanor, which was refusal to answer a congressional committee, the Un-American Activities Committee, whether he had been or had not been a member of the Communist Party.

That would never come up in this kind of a screening. In most States, misdemeanors run up to 1 year in jail or the penitentiary, and generally for the United States if there is a year and a day, it is a felony, and if it is a year it is a misdemeanor.

Possibly the difference between a misdemeanor and a felony, in limiting it only to a felony is not enough, so I would agree with the gentleman, Mr. McCormack, when he questions the adequacy of the penal provision.

Mr. McCORMACK. I was simply exploring. I noticed the language was confined to felonies, and only to any other charges that are pending at the time of the application. That is restrictive language, it would seem to me.

Dr. WATERMAN. We would have no objection to using the word "crime" instead of "felony." In that case, wouldn't it be advisable to limit this to those over age 16?

Mr. McCORMACK. Over what?

Dr. WATERMAN. Convictions of over age 16.

Mr. McCORMACK. I didn't get it.

Dr. WATERMAN. Convictions for those over age 16. Wouldn't an age limit be a good idea if you said "crime"?

Mr. McCORMACK. I would think that in a practical operation—this is something new. I haven't seen it before. I am just exploring. That is all.

I am not one of those who subscribe that a man should be convicted to the grave. I am not one of that type. But I noticed the language, and I thought you might get yourself in trouble in the future.

In the administrative exercise of handling a situation like that, if someone was in there for parking, for an offense of that kind, speeding, why, you would rule that out. I know I would, in connection with an application.

But you might have a man under this language who had been convicted of an offense that is a felony depending upon the punishment, as Mr. Fulton said, up to a year, under the Federal law, it would be a felony—misdemeanor and a year and a day, it is a felony. You might get yourself in an embarrassing position.

It seems to me you ought to have the opportunity of getting the full life of an applicant and administratively men of wisdom could pass on that.

Mr. HOFF. I think we ought to get the information irrespective of whether it was in the statute, but if the committee desires a different language, I would like to throw out this:

Conviction for violation of any Federal, State, county, or municipal law, other than a traffic violation, where a fine of \$25 or less was imposed, since your 16th birthday.

Mr. FULTON. Or more. You want the man to report \$25 or more.

Mr. HOFF. No, I did it the wrong way around, perhaps.

Mr. McCORMACK. Would you have it state what his past record was——

Dr. WATERMAN. With respect to crimes——

Mr. McCORMACK. Do you do it now?

Dr. WATERMAN. We have not in the past. We are proposing to do this in the future.

Mr. McCORMACK. I am not speaking in any critical sense. Why not in the past?

Dr. WATERMAN. The question never arose. We have had 18,000 fellowships awarded, and the question never arose until this case came up.

Mr. McCORMACK. If he applied for a civil service position, you have to set forth—ever once in a while a poor fellow puts down there he wasn't arrested, and then they catch him for lying on the answer that he wasn't arrested when he thought he was placed on file and not an arrest, not a conviction. There are experiences like that. This language here would be very restrictive.

Dr. WATERMAN. Would it help, Mr. Chairman——

The CHAIRMAN. Mr. Corman really has been recognized but he has yielded.

Mr. CORMAN. If I may respectfully answer the gentleman this point. I would point out first of all that the mere fact of making him list a crime at all is a departure and is stronger than either the Senate provision or the NDEA.

I am not arguing in favor of their proposals, but I am saying again it should be uniform.

If a person to apply for one of these scholarships must make disclosures, so should the people who apply under NDEA. I would suppose those committees responsible for the administration would want to review this, too.

I point out further, sir, that first of all I think there would be little argument that when a person has been convicted of a felony, he just may take this into consideration in making a grant.

Offenses below felonies, it seems to me, get to such a wide range, are less serious in nature, that there would be real difficulty in trying to evaluate the effect, and to have that evaluation made by the level of the National Science Foundation.

The CHAIRMAN. May I say to the gentlemen if this would be restricted to felonies it would eliminate Yellin, the very basis for this hearing is to include men who have violated the law as Yellin did. This would eliminate him.

It would seem to me the broader, and this is just my own observation, the broader the questions presented to the applicant for his answers, the better it is going to be. The answers will show character, background information which could easily be needed, background educational information, extracurricular activities in the school, and matters of that sort that would be of great benefit to the National Science Foundation in making its judgments.

If he then deliberately conceals or falsely files those answers, certainly it will show a lack of trustworthiness and a lack of character on his part.

Secondly, it would rule him out under the provision of 1001 of title 18 of the United States Code, where he could be punished for a misdemeanor.

Mr. FULTON. Could I comment, Mr. Chairman?

Mr. CORMAN. I yield to Mr. McCormack.

Mr. FULTON. I believe that the committee could consider the language of the counsel, Mr. Hoff, on this, because it is a broad language that covers a field Mr. McCormack has been discussing, and I think it is technically set.

I agree with the chairman that the current language would eliminate the Yellin situation from even the knowledge of the National Science Foundation, so they wouldn't even have the facts for consideration, not that they decide that every misdemeanor will be barring.

I think that you, Dr. Waterman, in the National Science Foundation should have a broad discretion on that. If you are given the responsibility of choosing, you should have the broad discretion that I have recommended, either under regulation set by statute, that you are authorized to make, or under regulations that you institute to cover cases of this type.

May I point out further that the proposal by Mr. Corman does not require the stating of a suspension or a dismissal from any educational institution.

Yellin had been suspended by the University of Illinois and had made no disclosure to the National Science Foundation for their consideration. That may have been nothing, but it may likewise have been a lot. And certainly the National Science Foundation should have had that information supplied by Mr. Yellin for the purpose of their consideration, as I believe it would be a material fact for consideration.

One other thing is this: I believe that the language of the paragraph (1)(b) should be included under section (4). Section (4) reads:

Whoever knowingly violates paragraph (2) or paragraph (3) of this subsection shall be fined not more than \$10,000 or imprisoned more than 5 years or both.

I will read (1)(b):

(b) has provided the Foundation with information regarding any felonies for which he has ever been convicted and stating what criminal charges, if any, are pending against him at the time of said application which are punishable by confinement of 30 days or more.

If I may say something to you on stating what criminal charges, I don't believe that is technically enough stated.

Secondly, it only means criminal charges pending at the time of the application. So that it doesn't quite cover the situation in time.

One other thing that I would do is—could I have Mr. McCormack's attention a minute on this one point—

The CHAIRMAN. We are going to have to adjourn in a few minutes.

Mr. FULTON. I wanted his advice on this point.

The CHAIRMAN. We want to recognize Mr. Ryan, too.

Mr. FULTON. I want Mr. McCormack's attention.

The CHAIRMAN. The committee will come to order.

Mr. McCORMACK. May I clarify in my mind, I don't want to inject, just clarify in my mind, first, do you need the authority, Dr. Waterman?

Dr. WATERMAN. We think not.

Mr. McCORMACK. Do you?

Dr. WATERMAN. No.

Mr. McCORMACK. On your applications now, do you have them set forth in answers to questions—

Dr. WATERMAN. We have here—

Mr. McCORMACK. Broad questions like—

Dr. WATERMAN. We are prepared to do that. I have here the form that we would issue. It is actually ready to go to the printer.

Mr. McCORMACK. The Federal level may be different than the State law. The State law up my way specifies what is a felony, and even if you are placed on probation you are guilty of a felony.

Some youngster might have done something, taken a car without authority. I don't think that would be considered a felony.

But some youngster might have been 15, 16 years old and might have been convicted of stealing a car when, as a matter of fact, he took it without authority. If he had counsel there, the judge might have found him guilty of larceny and placed him on probation when the youngster probably sneaked the car without the intent to steal, took it without permission of the owner, and the difference sometimes between that and stealing is very thin.

Dr. WATERMAN. Would you care for me to read this as it stands now, as it is proposed to be put on the form?

Mr. FULTON. Could I put my question to Mr. McCormack—

The CHAIRMAN. Do you have enough copies to give one to everybody?

Dr. WATERMAN. We have perhaps 10 copies. We have nine copies, Mr. Chairman. The statement is very short, if you would like me to read it.

Mr. FULTON. Could I finish on the language of Mr. McCormack before we leave that?

The CHAIRMAN. Dr. Waterman's question—

Mr. McCORMACK. I am not suggesting anything.

Mr. FULTON. I had yielded.

Mr. McCORMACK. It is for my own benefit.

Dr. WATERMAN. I thought I had the answer to your question. Shall I read it?

The CHAIRMAN. Go ahead.

Mr. WATERMAN (reading):

The National Science Foundation requests that you answer the following question accurately and completely: Since your 16th birthday have you been convicted for violation of any Federal, State, county, or municipal law other than a traffic violation where a fine of \$25 or less was imposed?

Answer "Yes" or "No." If your answer is "Yes," give in each instance charge, court, approximate date of conviction, and penalty imposed.

Mr. FULTON. Could I ask you, do you mean "more or less," "have you been convicted of a crime of \$25 fine or less"?

Dr. WATERMAN. Other than a traffic violation or where a fine of \$25 or less was imposed.

The man has to certify this is correct. The provisions of section 1001 of title 18, United States Code, are applicable to this report, as stated here.

The CHAIRMAN. Is that all you have on it?

Dr. WATERMAN. This is the confidential information about crimes, yes, sir.

The CHAIRMAN. You don't ask him for anything about his background, age, place of birth—

Dr. WATERMAN. This is merely the confidential listing of his crimes.

Mr. HOFF. This would be a separate sheet.

The CHAIRMAN. Of course.

Why would that be separate? It would seem to me that would be in the normal course of your questionnaire.

Dr. WATERMAN. Our thought was that this ought to be confidential and therefore separated from the other information.

The CHAIRMAN. Of course a convicted man is a convicted man. It is a matter of public record. You would try to make it a confidential record when it is a public record.

I have no particular objection to it, except it does seem to single out for special treatment a man who has violated the law and been convicted.

Mr. HOFF. This came out yesterday in answer to some of Mr. Hechler's statements, and I don't think that—it certainly is a matter of public record.

The only thing is, where this information is given in connection with an application where the great percentage of the people will not get the awards, a query of whether it should be made generally available.

The CHAIRMAN. A civil service form includes it as just a part of the application.

Mr. HOFF. Yes.

The CHAIRMAN. The average person goes through there and says "No, no, no, no." You will find 99 percent of the people who sign those will do the same thing.

Now, you single that out specially for specially favorable treatment because you have read—somebody has been convicted of a crime.

I may be all wrong about it. But crime is a matter of public record. It is intended to be.

Dr. WATERMAN. As Mr. Hoff says, we have three or four times as many candidates as awards. In that case, this information would seem to be wanted to be out in public—

Mr. McCORMACK. There are thousands of more applicants for civil service than get the job.

The CHAIRMAN. A man who has been convicted of a crime will know beforehand there is no use for him to apply, and therefore there is no use to give that information. You won't get him.

Mr. DADDARIO. Will the gentleman yield?

The CHAIRMAN. I promised to recognize Mr. Ryan.

Mr. RYAN. I know the time is short. I think this whole discussion raises any number of questions. I think yesterday Dr. Waterman made it clear that it was going to be the future policy of the Foundation to require this information on their application without any legislation.

I question whether or not it is wise to require one who has been convicted of a crime to publicly disclose that in applying for this kind of scholarship. I distinguish between one who applies for a Government position and one who is trying to further his education.

I think this may have a restrictive influence on those who are seeking to continue their education. It may well be that as youngsters someone may have had a run-in with the law, moved to another State,

perhaps, and it has been forgotten. He doesn't want to bring it up. Why should it be extracted from him?

Mr. FULTON. Why not, is the other question.

Mr. RYAN. We had an example yesterday before this committee of a man who voluntarily revealed a situation.

Mr. FULTON. You have to do a civil service job——

Mr. RYAN. I have the floor, Mr. Fulton.

The CHAIRMAN. Mr. Ryan is recognized.

Mr. RYAN. I think that is one of the questions that should be seriously considered.

I also question the procedure of requiring disclosure of misdemeanors. I think Mr. Corman in listing felonies has asked for information which is of major nature. Be that as it may, on this whole question of the bill which was before the committee yesterday; I would like to comment on that for a moment. I know we may not have Dr. Waterman here again. I commented yesterday I thought his statement was a good one.

I think the position of the National Science Foundation is a good one. I have prepared some remarks on H.R. 7806 which I will not take the time of the committee to read, but I would like to ask permission to insert them.

The CHAIRMAN. If there is no objection, they will be inserted in the record.

(The statement above referred to is as follows:)

Today we are considering legislation (H.R. 7806) which may have widespread implications not only on the attitude of Congress toward individual rights but on the preservation of our whole tradition of academic freedom. The arguments and conflicts which will grow out of this hearing are neither new nor revolutionary. But it is essential that we study the implications of the precedent which we are being asked to set in the light of our present world situation.

Our global struggle is most often referred to as a clash between two worlds, one free and the other enslaved. It is time we direct our gaze inward at our own system, to preserve its strengths and eliminate its weaknesses, to insure that we maintain the maximum amount of individual freedom without weakening the security of our Nation. Let us consider the purpose and significance of this amendment, remembering that the National Science Foundation Act, intended to spur science education, was adopted and passed within the context of the grave worldwide struggle for survival of a free society.

If implemented, H.R. 7806 would bring about a major departure in the practical administration of the Foundation and in its award procedure. It would also drastically change the fundamental logic of the program, the theoretical basis for a grant, and the relation of these awards to our battle in the cause of freedom.

By substituting "on the basis of character, ability, and loyalty to the United States and its constitutional form of government" for the present criterion of "solely on the basis of ability," this bill would necessitate a full security investigation of each fellowship applicant.

The bill makes no attempt to define either "character" or "loyalty." Both are abstract qualities and not susceptible to absolute definition. By what criteria would the Foundation make a determination?

Security clearance may be necessary in work which is directly related to our national defense. But work done with the Foundation's funds is confined almost entirely to the field of basic research which does not involve security problems. If a project does lead into a restricted area of national defense, Dr. Waterman has explained the scientist must be cleared under present procedure.

If the research itself does not involve restricted information or material, why then is either the proposed or present affidavit necessary?

Certainly they will not prevent confirmed subversives from lying about their affiliations, nor help to reveal any network of Communist infiltrators. What then, if not security, justifies this financial burden to the Government and this distrustful treatment of our students and scientists?

It has been argued that compliance with this type of affidavit is both a symbol of good faith and loyalty on the part of the recipient and a means of instilling loyalty in those who are being groomed as the intelligensia of the immediate future. But the bill does not require one statement of devotion and loyalty; it now contains two of them. One is the affirmative oath of allegiance to our Nation. The other is the negative disclaimer affidavit.

The disclaimer measure implies a basic distrust in our young people who have just subscribed to the loyalty oath. The demand for this additional assurance of loyalty reflects a lack of confidence not only in these young people and their future, but in the free and open channels of our educational process itself.

There can be no sound reason for requiring this disclaimer affidavit of students who ask the Government for assistance. Why single them out from farmers, homeowners, small businessmen, and so forth?

While failing as an effective public safeguard, the affidavit also represents a basic misconception of the relation of oaths to what we call loyalty. Loyalty cannot be equated with a mere outward formal expression, nor can patriotism be measured by lipservice to an oath.

Loyalty to one's country defines quantitative measure. Loyalty to country is rather a spiritual quality which cannot be bought by grants, or coerced by threats, or strengthened by automatic, thoughtless responses to stock questions. Loyalty will not come from legislation or slogans, but rather from an understanding of, and a dedication to, fundamental principles. And this, ironically enough, can only come from education.

These so-called security provisions are inconsistent with the true meaning of democracy. Once we condition a fellowship grant upon the applicant's beliefs and associations, we have violated the first amendment and have denied our faith in a free academic system.

But since the proponents of this affidavit usually emphasize the fact that both the NSFA and the NDEA were legislated under the guise of aids to the national defense and welfare, let us explore a neglected consequence of this assumption.

What we are defending is our way of life, the American system of openness and freedom and opportunity to all men, which has given us the greatest culture and the highest standard of living the world has ever known.

While using the rhetoric of our democracy, advocates of this type of provision unwittingly seek to deny the very essence and foundation of democracy. For democracy must be defined in microcosm, in terms of individual rights and liberties. Democracy must begin with an affirmation of confidence in the integrity of the individual, a condition which this requirement would deny. Congress contributes to a reign of mistrust and suspicion when it ignores a fundamental concept of democratic citizenship: that the individual citizen is, by definition, loyal, until proven disloyal.

Let us be aware of the dangers which we court by adopting measures which suggest an atmosphere of doubt and insecurity. As a member of the Senate, President Kennedy twice led the movement for the repeal of the negative disclaimer affidavit from the NDEA. Mr. Kennedy quoted Judge Learned Hand's eloquent description of the risk we take by substituting vague and hollow notions of security for the cornerstones of individual liberty:

"I believe that the community is already in process of dissolution where each man begins to eye his neighbor as a possible enemy, where nonconformity with the accepted creed, political as well as religious, is a mark of disaffection; where denunciation, without specification of backing, takes the place of evidence; where orthodoxy chokes freedom of dissent; where faith in the eventual supremacy of reason has become so timid that we dare not enter our convictions in the open lists, to win or lose.

"Such fears as these are a solvent which can eat out the cement that binds the stones together; they may in the end subject us to a despotism as evil as any that we dread; and they can be allayed only insofar as we have tangible grounds for misgiving. The mutual confidence on which all else depends can be maintained only by an open mind and a brave reliance upon free discussion."

With this in mind, let us demonstrate our confidence and belief in the American way as opposed to competing ideologies by a positive affirmation of freedom

of thought rather than by a negative campaign to suppress our detractors and dissenters.

President Kennedy, in his special address to the Congress on May 25, 1961, presented the only plausible position for America to adopt: "These are extraordinary times. We face an extraordinary challenge. But our strength as well as our convictions have imposed upon this Nation the role of leader in freedom's cause. * * *

"* * * It is not a negative or defensive role—it is a great positive adventure. We stand for freedom. That is our conviction for ourselves, that is our only commitment to others. No friend, no neutral, and no adversary should think otherwise. We are not against any man, or any nation, or any system, except as it is hostile to freedom."

In considering the bill before us today, let us remember that in the final analysis "the ultimate source of our national strength is the quality and vitality of our own society."

Rather than weaken our Nation, our democracy, and our position of strength in this great world battle by a loss of perspective, let us once and for all demonstrate our confidence through an affirmation of the principles which guided our forefathers.

Let us once again recognize that we need search no further for our national purpose than the spirit and goals which created our Nation. "Let us resume that measured pace toward the ideal of freedom and opportunity" which we can achieve only if we are "united in (our) commitment to freedom."

Mr. RYAN. I think we are considering legislation that has widespread implications, our attitude and the attitude of Congress toward individual rights on our whole tradition of academic freedom. I think we should study these implications very carefully, and I have made comments along that line.

Mr. FULTON. I had the floor previously.

The CHAIRMAN. I know you had it previously—

Mr. FULTON. I recognized Mr. McCormack and I never got it back.

The CHAIRMAN. I want to say this because we have to adjourn in a few moments.

Mr. RYAN. May I ask one question—

The CHAIRMAN. I would like to say, if the Chair might have an opportunity to say something, I want to say that what I think we should do, when we do adjourn, is to turn this matter over to our counsel and to counsel for the National Science Foundation.

It seemed to me we are very, very close to getting together on a bill that is acceptable, and therefore I would ask our counsel, Mr. Hammill, to meet with the counsel for the National Science Foundation and ask them if they can work out a bill which would be acceptable, and then bring it back to the committee for our consideration.

Now, you have a comment, Mr. Fulton?

Mr. FULTON. I believe there should be a provision putting under section (4), that is, the penalty section, a concealment or falsification of a material fact requested on the application form of the National Science Foundation.

If there is a concealment or a falsification of a material fact of the applicant on matters that are basic to the consideration of the fitness of the applicant for a scholarship or fellowship, then that person should be put under the penalty section, which is (4):

Whoever knowingly violates paragraph (2) or paragraph (3) of this subsection to be fined not more than \$10,000 or imprisoned not more than 5 years or both.

The CHAIRMAN. I don't think it is necessary, because section 1001 of title 18 of the code makes it a crime already.

Mr. FULTON. My other point is this: When the Yellin case occurred, that of course was a notice that there might be other cases of this type.

So my question is: Has the National Science Foundation made any check of its applicants or the donees or fellows or scholarship award-ees to see what cases of the Yellin type there might have been, and also how many applicants that you might have or fellowships or scholarships in current existence for people who either you know are members or have been members within 5 years of subversive organizations? How many of that latter type do you have pending?

Dr. WATERMAN. As far as I know, none.

Mr. HOFF. We don't know of any.

Mr. FULTON. That belong to any subversive organizations or have within 5 years?

Mr. HOFF. We know of none.

Mr. FULTON. You have made no check to see?

Mr. HOFF. All we could do is write out a letter and say, in effect, "Because we find that someone was, would you please say"—I think this would cause quite a—

Mr. FULTON. Just a minute. There has been no investigation made subsequent to the Yellin matter coming up?

Dr. WATERMAN. No.

The CHAIRMAN. Mr. Daddario wants to be recognized before we adjourn.

Mr. DADDARIO. Just a couple of questions.

Mr. FULTON. Have you got the Justice Department in on the Yellin case to see in which case he might have been telling the truth or falsehood on his application to the steel company for work which was prima facie contradictory to his application to the National Science Foundation for a fellowship?

Mr. HOFF. As I testified last time, we notified the Department of Justice and to the best of my knowledge they do not feel there is anything to proceed on.

Mr. RYAN. Would the gentleman yield?

Mr. FULTON. Have they given you a report?

Mr. HOFF. Yes, sir.

Mr. FULTON. I didn't hear you. Have they given you a report?

Mr. HOFF. Yes, sir.

Mr. FULTON. Can you put that report in the record?

Mr. HOFF. I think I would have to ask Justice.

Mr. FULTON. I would like to have that report in the record, Mr. Chairman.

I yield.

Mr. RYAN. In other words, you received a report from the Justice Department that said in their opinion there was no basis to a prosecution in this matter?

Mr. FULTON. I object. If the report doesn't go in—

The CHAIRMAN. I think the witness shouldn't be required—

Mr. HOFF. I think I already did testify. I think my answer is in there.

I won't try to restate it, but I think I have answered that question in the record already.

Mr. RYAN. One question of fact: At the present time today, where is the application, the affidavit and disclaimer, disclaimer affidavit of Yellin?

Mr. RUTTENBERG. We sent them photostats——

Dr. WATERMAN. We have the original and they have photostats.

Mr. RYAN. The Justice Department has not taken possession of those affidavits?

Mr. HOFF. Correct.

The CHAIRMAN. Do you have a couple of quick questions?

Mr. DADDARIO. The chairman has suggested, Dr. Waterman, that counsel of the National Science Foundation and our counsel get together, which I think can eliminate many of the problems involved.

There is one question that comes to mind in view of the testimony that you submitted yesterday, that is, since these hearings have commenced you have met with your Board of Governors, as I understand it, and you have widened the latitude of approach to cover this kind of problem.

As I understand it, you believe that the steps you have taken would eliminate this kind of situation from coming up again.

Dr. WATERMAN. Yes.

Mr. DADDARIO. Anything that is reduced to writing would simply be a reduction of the steps already taken as to the printed form, rather than to leave it within the rules and regulations of the National Science Foundation?

Dr. WATERMAN. We expect by making changes in the form to get the information that will allow us to act on cases like this.

Mr. CORMAN. Will the gentleman yield?

The CHAIRMAN. We are going to have to adjourn at this time. Will the gentleman take over?

Mr. DADDARIO. Just one point.

The CHAIRMAN. Will the gentleman take the chair? I have to run.

Mr. DADDARIO. Then, Dr. Waterman, just on that particular point, all we would be doing by reducing this to writing would be to put into printed effect steps you have already taken to correct the situation which has been called to your attention by the committee?

Dr. WATERMAN. Yes, sir. It is done specifically in a bill such as the bill that Mr. Corman——

Mr. CORMAN. Would the gentleman yield?

Dr. WATERMAN. It does introduce the criminal sanction——

Mr. CORMAN. Further it fixes the approach of the disclaimer oath and makes it conform to the proposed change in NDEA, which is something entirely separate.

Dr. WATERMAN. You are quite right.

Mr. CORMAN. The portions of the amendment that deal with the disclosure of crimes is covered by the proposed regulation but not the other part which changes the disclaimer regulation.

Mr. DADDARIO. Then just so I may adjust my own thinking to this problem, in view of the chairman's recommendations, and so that I might be prepared to come to some conclusion as a result of what is finally reduced to writing, do you then get to the point where the steps already taken coincide with the recommendations made by Mr. Corman?

Dr. WATERMAN. I believe that in certain respects as Mr. Corman has just said, there is a change. But I believe the same result could be accomplished. It could be done perhaps more specifically in Mr. Corman's bill.

Mr. DADDARIO. In this area of discussion, this is what can be worked out with the counsel, and you can then submit this proposition to us at a later date.

Mr. HOFF. I would just like to add the one thing. I think Mr. Corman is quite correct that his bill makes a constructive contribution in terms of substituting the criminal sanction for the affidavit of disclaimer, which has been under such continual attack.

Dr. WATERMAN. That is correct.

Mr. DADDARIO. This coincides, as I understand it, also with the steps already taken and with the intent, at least with the intent of what you people have had in mind.

Mr. HOFF. We couldn't do this. This is a statutory requirement.

The rest of Mr. Corman's bill does coincide precisely with what we have in mind, and which we can pretty much do by administrative action. We can't release people from signing the affidavit of disclaimer.

Mr. DADDARIO. I understand this is a statutory requirement. As we have adjusted ourselves to the issue under discussion, Mr. Corman's recommendations coincide pretty well with what you people have had in mind, and you have no violent objection to it, including that section which would amount to a statutory change.

Mr. HOFF. That is correct.

I was trying to say I think that is a definite step forward to anything we can do.

Mr. DADDARIO. Any further questions?

The committee will adjourn.

(Whereupon, at 11:30 a.m., the committee adjourned, to reconvene at the call of the Chair.)

AWARDS OF FELLOWSHIPS AND SCHOLARSHIPS UNDER THE NATIONAL SCIENCE FOUNDATION ACT

TUESDAY, AUGUST 15, 1961

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE AND ASTRONAUTICS,
Washington, D.C.

The committee met, pursuant to call, at 10 a.m., in room 214-B, New House Office Building, Hon. George P. Miller presiding.

Mr. MILLER. The item of committee business is H.R. 8556, a bill to amend the National Science Foundation Act of 1950 to require certain additional information to be filed by an applicant for a scholarship or fellowship and for other purposes.

(H.R. 8556 is as follows:)

[H.R. 8556, 87th Cong., 1st sess.]

A BILL To amend the National Science Foundation Act of 1950 to require certain additional information to be filed by an applicant for a scholarship or fellowship, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 16(d) of the National Science Foundation Act of 1950 is amended to read as follows:

"(d) (1) No part of any funds appropriated or otherwise made available for expenditure by the Foundation under authority of this Act shall be used to make payments under any scholarship or fellowship awarded to any individual under section 10, unless such individual—

"(A) has taken and subscribed to an oath or affirmation in the following form: 'I do solemnly swear (or affirm) that I bear true faith and allegiance to the United States of America and will support and defend the Constitution and laws of the United States against all its enemies, foreign and domestic'; and

"(B) has provided the Foundation (in the case of applications made on or after October 1, 1961) with a full statement regarding any crimes of which he has ever been convicted (other than crimes committed before attaining sixteen years of age and minor traffic violations for which a fine of \$25 or less was imposed) and regarding any criminal charges punishable by confinement of thirty days or more which may be pending against him at the time of his application for such scholarship or fellowship.

The provisions of section 1001 of title 18, United States Code, shall be applicable with respect to the oath or affirmation and statement herein required.

"(2) (A) When any Communist organization, as defined in paragraph (5) of section 3 of the Subversive Activity Control Act of 1950, is registered or there is in effect a final order of the Subversive Activities Control Board requiring such organization to register, it shall be unlawful for any member of such organization with knowledge or notice that such organization is so registered or that such order has become final (i) to make application for any scholarship or fellowship which is to be awarded from funds part or all of which are appropriated or otherwise made available for expenditure under the authority of section 10 of this Act, or (ii) to use or attempt to use any such award.

"(B) Whoever violates subparagraph (A) of this paragraph shall be fined not more than \$10,000, or imprisoned not more than five years, or both."

SEC. 2. Section 10 of the National Science Foundation Act of 1950 is amended by adding at the end thereof the following new sentence: "Nothing contained in this Act shall prohibit the Foundation from refusing or revoking a scholarship or fellowship award, in whole or in part, in the case of any applicant or recipient, if the Board is of the opinion that such award is not in the best interests of the United States."

Mr. MILLER. Mr. Hammill, you handled this bill. Do you want to make a statement with respect to it?

Mr. HAMMILL. Yes, sir, Mr. Miller.

This bill follows very closely the one which was suggested by Dr. Waterman in his recent letter to the committee. There have been a couple of changes which were proposed and adopted during the last meeting of the committee on this matter. We have not yet heard from the National Science Foundation on this particular bill. They have been asked for a report on it, and the report should be received this week.

I have been in informal touch with the National Science Foundation's General Counsel's Office, and I have been told that they do not intend to oppose this measure.

Mr. MILLER. This bill is the result of long deliberations and rather long hearings, and it represents the unanimous approval of those who were present during that time. Isn't that right?

Mr. HAMMILL. Yes, sir. This proposal was considered by the committee and adopted during a recent meeting of the committee. Subsequently it was dropped in the hopper, and now it is up for formal approval.

Mr. ANFUSO. Mr. Chairman, I understand this is the bill Mr. Corman sponsored.

Mr. CORMAN. That is almost correct; it is quite similar.

Mr. ANFUSO. Also Mr. Ryan had some views on it, I believe.

I wonder if we shouldn't have Mr. Ryan here now? Has he been called?

Mr. MILLER. Mr. Ryan has had an opportunity to be informed. There is a quorum present and I don't see any reason why we should further delay it. I don't know that it is necessary to belabor the thing, since we all favor this.

Here is Mr. Ryan now.

Mr. ANFUSO. I was telling the committee, Mr. Ryan, you probably wanted to say something on this bill.

Mr. MILLER. All right. Mr. Ryan is here.

I don't know that it is necessary we belabor the bill. The proposal was approved in committee. You were here at the time. This meeting is just for formal approval of the bill.

The Chair will entertain a motion to approve the bill.

Mr. MOSHER. Mr. Chairman, could I ask one question?

Mr. MILLER. Yes.

Mr. MOSHER. Mr. Hammill has just said the Foundation will not oppose the bill. The implication here is that they would prefer the law as it now stands, but they do not oppose the bill.

Is that correct?

Mr. HAMMILL. I think that is substantially correct.

Mr. MILLER. I think that is a correct statement. They would rather leave the law as it is, but the Science Foundation has to become a little more practical in their approach to some of these things.

Mr. Bass.

Mr. BASS. Mr. Chairman, I would like to ask Mr. Hammill to tell the committee exactly in what respect H.R. 8556 differs from the proposed draft Dr. Waterman submitted in his letter of July 31.

Would you?

Mr. HAMMILL. Yes, sir; I will, Mr. Bass.

The draft submitted by the National Science Foundation would require applicants for scholarships and fellowships to disclose convictions of felonies only.

The bill before you changes that to include crimes of all kinds, misdemeanors as well as felonies, except those committed by juveniles, and minor traffic offenses, the penalty for which does not exceed \$25.

Mr. BASS. Maximum penalty?

Mr. HAMMILL. Maximum penalty.

Mr. BASS. That would then include second offense speeding fine.

Mr. HAMMILL. Yes, sir; if the fine were, say, \$50, such a conviction would have to be disclosed in the application form.

I might add that Mr. Yellin the person whose case gave rise to the hearings which have resulted in this piece of legislation, was not convicted of a felony; he was convicted of a misdemeanor, namely contempt of Congress.

So the committee decided to change the bill to include all crimes, misdemeanors as well as felonies, with the two exceptions which I mentioned.

Mr. BASS. Is that the only way in which this bill differs?

Mr. HAMMILL. No, sir, section 2 of H.R. 8556 is an amendment to the Foundation's draft bill proposed by Mr. Casey at our last hearing on this subject. This provision confirms the National Science Foundation's authority to withhold or to revoke a scholarship or a fellowship at any time in best interest of the United States.

In my conversations with the Foundation's General Counsel's Office, they stated that they view the present law as giving them this authority, but they do not object to the addition of this provision since, in their judgment, it simply confirms already existing authority.

Mr. BASS. Is it your undersanding that the National Science Foundation is about to submit some comments, additional comments?

Mr. HAMMILL. Yes, sir. They have been asked for a report on the bill, and I understand that the report is now in draft form. It has not yet been sent out but probably will be received this week. Informally, I am told that the report will not oppose this bill.

Mr. BASS. The only question I see is whether, as a matter of courtesy, Mr. Chairman, we should wait at least to see this report.

Mr. MILLER. Well, we have had this matter before us how long? They have been here, they have testified; we have been in constant communication with them. I would hardly want to make the charge they were dilatory, but they certainly haven't pressed the matter too closely.

Frankly, the matter is now before us and we will now await the pleasure of the committee.

Mr. FULTON. They are likewise advised of the various positions on these points, so the fact we have put these provisions in is not a matter of concern to the National Science Foundation.

Mr. MILLER. I entertain a motion.

Mr. VAN PELT. I so move.

Mr. CORMAN. Second.

Mr. MILLER. All those in favor signify by saying "aye." Contrary minded—

Mr. FULTON. Mr. Chairman, I would like a rollcall.

Mr. MILLER. All right; the clerk will call the roll.

Mr. FINCH. Mr. Brooks.

(No response.)

Mr. FINCH. Mr. Martin.

Mr. MARTIN. Aye.

Mr. FINCH. Mr. Miller.

Mr. MILLER. Aye.

Mr. FINCH. Mr. Fulton.

Mr. FULTON. Aye.

Mr. FINCH. Mr. Anfuso.

Mr. ANFUSO. Aye.

Mr. FINCH. Mr. Van Pelt.

Mr. VAN PELT. Aye.

Mr. FINCH. Mr. Bass.

Mr. BASS. Pass.

Mr. FINCH. Mr. Riehlman.

Mr. RIEHLMAN. Aye.

Mr. FINCH. Mr. Daddario.

Mr. DADDARIO. Aye.

Mr. FINCH. Mrs. Weis.

Mrs. WEIS. Aye.

Mr. FINCH. Mr. Mosher.

Mr. MOSHER. Aye.

Mr. FINCH. Mr. Roudebush.

Mr. ROUDEBUSH. Aye.

Mr. FINCH. Mr. Roush.

Mr. ROUSH. Aye.

Mr. FINCH. Mr. Bell.

Mr. BELL. Aye.

Mr. FINCH. Mr. Davis.

Mr. DAVIS. Aye.

Mr. FINCH. Mr. Ryan.

Mr. RYAN. No.

Mr. FINCH. Mr. Corman.

Mr. CORMAN. Aye.

Mr. FULTON. Did the gentleman from New Hampshire pass?

Mr. BASS. That is correct.

Mr. FINCH. Fourteen members vote aye, one member abstains, and one member votes no, Mr. Chairman.

Mr. MILLER. Let the record show that a quorum was present and the bill was passed in this manner.

Mr. CORMAN. Before we adjourn, is it necessary that we have a formal motion to the effect that the chairman is empowered to take whatever action is necessary to get this measure to the floor?

Mr. MILLER. I believe that is understood, but if you want to make a motion you may do so.

Mr. CORMAN. I make the motion.

Mr. FULTON. I second.

Mr. MILLER. I will rule that the motion is passed for the chairman to take the necessary steps. And without objection the committee will stand adjourned until the call of the Chair.

(Whereupon, at 10:05 a.m., the committee adjourned, to reconvene at the call of the Chair.)



