Interview with Walter Rosenblith  
by Eden Miller  
Marstons Mills, Massachusetts  

Session 3 - July 26, 2000  

TAPE SIX, SIDE ONE  

EM: Today is July 26, 2000. My name is Eden Miller, and I am in the home of Walter Rosenblith in Marstons Mills, on Cape Cod, where I am conducting the third in a series of interviews with Walter and his wife, Judy. Walter began his career at MIT in 1951 as an associate professor in electrical engineering and eventually became provost of the university before retiring in 1980. Today we will be speaking about Walter's years as chairman of the faculty, associate provost, and provost at MIT.

WR: Not so fast. I will repeat the fact that being a "foreigner," whichever institution I had contact with -- NYU, UCLA, South Dakota School of Mines, and Harvard -- I each time tried to socialize myself into the atmosphere of the institution, which meant that, as I said before, at UCLA fortunately I joined the International Club where Judy and I met. And at South Dakota it was difficult. The climate there was a very un-university one, I would say, and yet we made contact with people because people were so friendly. At Harvard it was Dr. Boring's lunch that was my socializing medium. And when I came to MIT I tried to do the same there and especially -- MIT had a culture that was quite different from the other institutions. So I tried, together with teaching when I first came, to belong to departmental committees and since I was sort of an oddball, they sometimes liked to have somebody who wasn't either an alumnus or had belonged to the same faculty environment. And then I was on an international committee for the Fulbrights. MIT had a selection committee for these, and people thought, well, he is from abroad so he can be helpful. And it turned out that this belonging to committees and also having the contact with the people at MIT who knew about my trouble with security clearance, because it wasn't kept secret, I knew a lot of people. I got to know a lot of people on the faculty, and the interesting thing was that at that time the atmosphere at MIT, there were a lot of people who after the war and after the Korean War had started, students and faculty who wanted to do
something that was not war-oriented. And so Gordon Brown, who was then the dean, made me chairman of a Committee on Engineering and Living Systems. That was quite a -- because, you know, I had done this stuff in France. I had studied what happened to people in the presence of noise. Then I had done the thing for the Navy. So he felt that I was probably appropriate for that. And then the director of the National Institutes of Health came to MIT when Howard Johnson became president and suggested to MIT it should start a medical school and offered $50 million. And that was a big sum, but MIT decided, not so fast. So the new president, Howard Johnson, and Jerry Wiesner knew that there was a Committee for Engineering and Living Systems and we were part of the evaluation -- should MIT do this or not? And MIT, I think wisely, decided that it was not going to do this because $50 million is not enough. You have to have connection with hospitals, not only by individuals but institutionally, and a new president couldn't afford to come in and say, the first fund raising I will do will not be for the established fields. But that again exposed me to a lot of new people that previously hadn't known me on the faculty.

EM: This Committee on Engineering and Living Systems, when was this formed?

WR: It was formed in the mid-'50s. It was after -- I think to a large extent the security clearance was behind it. Yes '55. It was behind it. Howard Johnson became president in '56 and the Engineering and Living Systems thing already existed. So he and Wiesner decided to make use of it.

I wanted to explain to myself, when I thought about this, how come I was picked? I was not the regular fellow. In Howard Johnson's book there is a phrase quoted from my predecessor [as chair of the Faculty], who was a famous economist, [Charles P.] Kindleberger. Kindleberger said, when the years of trouble came, he said, Well, everything was fine till you, Howard Johnson, got in there with Wiesner and Rosenblith, and then all hell broke loose. (laughter) But that is trying to explain to myself, as I think back now, how come I was picked? I came there in '51, and I was certainly an oddball, and how come I was picked by the Nominating Committee --
you see, there is a Nominating Committee for practically all these things, and the
nominations have to be approved by the faculty -- and I went to faculty meetings,
which not everybody did. I mean, faculty meetings were once described: When you
have 10% of the faculty, everything is going well; when you have 25%, you shouldn't
worry; and when you get 90%, that's a disaster. So how come I was picked for
nomination? And at that time it was nomination for only one person for the chairman
of the faculty. And I must say that the chair of the faculty has an interesting role. I
might describe the role. The role is that he is -- and at that time it was only he -- that
he is the person who chairs the faculty meeting in the absence of the president. So
this is an interesting way of having administration and faculty interact in that respect.
And he prepares, together with other people from the administration, the agenda of
the faculty meetings. And MIT has, after the war as an innovation, something called
Academic Council. The Academic Council is composed of the president, the provost,
the deans of all the schools, and a couple of people on the administration side who are
not faculty, but I don't know when the chairman of the faculty became an Academic
Council member. And so there is on this in some sense highest council of the
institution a representation of the faculty. I think my predecessor, Kindleberger, was
very well known in his profession, he was an economist, he belonged to a school that
was essentially the beginning of the Sloan School, and he, however, was very witty,
and whenever he participated, from what I learned -- like you are broken in, brought
in before you had really become the chairman of the faculty -- to see how it was
running, he didn't speak much. Now that changed in the years that I was there
because there were more things that had to be discussed. And the president and the
provost considered that their, shall I say, their real advice. It also dealt with problems
that were educational problems. As chairman of the faculty, I was the chairman of
the Committee for Educational Policy, and MIT was still in this process of changing
from the kind of engineering school that it had been before the war to something that
became broader. The Lewis Committee (Committee on Educational Survey, 1949)
suggested a school of humanities. And so the School of Humanities came in. And
from that school, Kindleberger was the chairman of the faculty, which in general had
always been either engineers or scientists -- School of Engineering or School of
Science. So in that respect, I was an "engineer." And lots of people knew me, and the Nominating Committee suggested I become chairman of the faculty. I was a little taken aback, I must say, because I didn't quite think that I knew enough people. But the chairman of the faculty sat also on another couple of councils that were not of the same importance. But at least be in touch with all the features of administration. There was Academic Council, Faculty Council, there were the chairmen of departments, and so on, and Administrative Council, where the various administrators sat -- the lower level administrators. So I had contact with the whole institution, and I think that I certainly benefited from that. I got to know MIT in a very different way.

I also participated in the meetings that the alumni were putting on. Now those were the people with whom I had the least contact because most of them were engineers of the old school, and many of the people important in the alumni organization were people who came out of MIT during the depression. So at that time the alumni were not too well-to-do. And I went to an annual meeting of the Alumni Association, and I heard them say, You, MIT, come to us when you need money, but you don't let us participate in the way the school should be run. And during the years of trouble I remember there was a meeting of the Corporation, which was mainly engineers who had gone into industry. So they were the people who had the contact with the money. But during the years of trouble Howard Johnson, Wiesner, and I went at the Faculty Club to the toilet together, and I heard the phrase, There goes the overhead. (laughter)

So I had the exposure to all these things, and I think that's why during the years of trouble I was able to be reasonably effective in terms of the way the institution was kept out of trouble to some extent. And let me say that I was interested in the Committee for Educational Policy and spent a lot of time at their meetings. I chaired presumably that committee, though there were lots of other people. So I was not only involved as an administrator but I also got involved in the academic programs of MIT. At one stage the big fight in the faculty meeting was -- we had had a certain amount of physics, a certain amount of chemistry, and so on, but people said now we
need to require courses in humanities and courses outside of just that. And the great
drama was when the then chairman of the chemistry department got on to the floor of
the faculty and cried that if we cut down the amount of chemistry, he couldn't teach
honest chemistry. That was the kind of fear of change that I saw in that -- and at the
faculty meeting at that time there were no students. Later on, during the troubled
years -- and I think that was still while I was faculty chairman -- we rearranged the
situation so that the students could send essentially delegates, but only a few of them
had also the right to speak on the floor. So that was a period in which there was a lot
of change, and I think my role of faculty chairman became most important when the
troubles started.

EM: Can I go back to the faculty meeting you mentioned where the chemistry professor
was lamenting the loss of an hour of chemistry? In this situation, you are chair of the
faculty, and you're seeing faculty members give these dissenting, dramatic
presentations of themselves. What do you do? How do you keep the faculty
together in conversation reaching for a resolution?

WR: Well, the fact is that finally the faculty votes. And what you have to be sure is that
nobody felt that he had not been heard. And I think Howard Johnson and Stratton
before, perhaps less so, was capable of giving that fairness. So the spirit has to be one
of fairness and colleagueship. And the percentage of faculty who appear each time
said something to the people who are under what they call attack, whether they have a
chance to persuade the majority of the faculty or not. And I think the few times that I
chaired -- because usually the president tries to chair the faculty meetings, but the
provost is not chairing the faculty in the absence of the president, but the chairman of
the faculty is -- so the president consults with me as chairman of the faculty, what are
the opinions that are represented. And so I keep in touch with all the chairs of
committees, especially the relevant committees, and that again is something where I
think I was a little different than my predecessors.

EM: How so?
WR: Because I was willing to spend my time on that. Most chairs of the faculty before me were people who felt the faculty meeting was sort of a nuisance in terms of time, which I think was a bad situation. But I think after the years of trouble, the chairs of the faculty were all differently oriented with respect to the students and with respect to opinions in the faculty, there were not just education problems, but others. I think there was this change that came during the '60's. We had meetings when I was chairman of the faculty in the big auditorium because there were that many people. And people could only go to the faculty meeting if you were a member of the faculty. Now usually there was no question about that because nobody would question you at the door. But during the particular times of trouble there was somebody at the door to identify everybody, if they were faculty. And Howard Johnson in those most difficult meetings was chairing it from the stage, and I was standing right next to him. And when somebody wanted to speak, he said, Walter, who is he? If he didn't know him.

EM: And how often did you know the person?

WR: Well, I made a couple of goofs, and one of the goofs -- I said I thought he was too young-looking. And I said, Are you a member of the faculty? I asked straight. So he gave his name and he was a member of the faculty. And later on, he was also one of the people among the faculty who were against the war and was quite active. I thought he looked like a graduate student. But I apologized to him, that I hadn't recognized him, and he is now retired like I am. (laughter) Singer was the man. I have never forgotten that incident. That was only in the years of real -- I would say almost months -- of real trouble. But during that period MIT appointed also a psychiatrist as a, I think, dean for student affairs for the special -- we had other deans of that nature. But he -- Benson Snyder. And between Killian's suggestion and his suggestion, we put together a committee that was composed of all the components of the institution -- Corporation, I think originally (Vannevar) Bush was even in it. By the way, I checked -- I haven't checked carefully -- but Bush certainly was aware of the fact that he needed the support of the academic community -- he was fighting with
some of the senators about the National Science Foundation. And last night Frank Press reminded me of the fact -- when we were talking about Bush, and so on -- that it was Jerry Wiesner only who got not just the National Science Foundation but also other departments of the government to support science. So let me go back -- there was this committee. Some Corporation members -- obviously the ones most open-minded about this -- then there were administration, and then there were representatives of students. And that committee was called, if I remember correctly, Facs Sacs, trying to say faculty and sacs student. At the AC's Advisory Committee. And there one tried not to put high administrators on. But it was faculty and students. And I think that in terms of the faculty chairmanship, the one thing that was really a big change was -- it was the times that changed MIT, it wasn't the faculty chairman. The only thing you could do is try to resonate with the climate in the country. And try to be sure that, for instance, we discussed in the Academic Council that there shouldn't be police on the campus. And it was, I think, the skill of Howard Johnson and Wiesner to make that happen. And especially in the contrast to Harvard, where there had been invasion of the president's office and they had torn up everything. This didn't happen here at that time, only a little later, when Howard Johnson's office was broken into and Wiesner grabbed the computer records and talked the students out. At that time, as chairman of the faculty, I volunteered to talk to the students. Wiesner and I had spent several hours in what is now the Stratton Center -- the Student Center -- with that famous case of the AWOL soldier. And with all the other people, including David Baltimore, who is now president of Caltech. But essentially, the fact that we were trying to give everybody who had opinions on the campus -- give them a chance to be listened to -- I think that was the difference at a certain stage. By the time there was a further radicalization of a much smaller group at MIT, this would no longer do. They tried then to do some of the things like breaking into the office, and then also trying to disturb a Corporation meeting and other things. The real problems were that there was the question that MIT shouldn't have any connection with the war. And the two things that were particularly targeted were on the one hand. the Lincoln Laboratory, which was essentially an Air Force laboratory. But we might talk about that just for a minute. It was far away in Lexington. And it
was not directly involved in weapons matters. What they were doing was essentially the continuation of the Radiation Laboratory. It was research, so much more applied. But not directly weapons. But the other laboratory, which was called the Instrumentation Laboratory, that laboratory, which was run by Stark (Charles Stark) Draper, that was a laboratory that was more or less directly involved in the problem of weapons. And the students who stayed together as a small group -- these were the two things that they attacked in particular. And that was the time at which we were able to persuade MIT's Corporation and others that MIT should not have secret research on the campus. That was the distinction we made. Whatever Draper did, and whatever Lincoln did, they did that were in relation to essentially war effort. But at MIT we shouldn't have classified work.

EM: Why did you feel that way?

WR: Because that was the only way in which we could get the consensus of the overwhelming part of the faculty and students.

EM: Did you believe that or was this a way of building a bridge?

WR: No, we believed that. There was a special committee under the chairmanship of Dean (William F.) Pounds, who was the dean of the Sloan School, but it was again the way that this was put together. Pounds was certainly -- I don't know what his position was on these problems himself -- but the committee ran from Pounds to (Noam) Chomsky. So all the views of the faculty were represented. And, of course, classification is a thing that in the olden times of MIT did not only apply to weapons or war, but it used to be that in the pre-World War II times, private companies gave contracts to MIT units, but they demanded in the arrangements that were made that whatever the results were, they were kept secret and not published. And that, of course, is a problem that has existed everywhere, and MIT didn't want that kind of secrecy either. How it is today, I don't really know because there are so many arrangements with private companies, and then there are quite a few professors who
have formed companies essentially around their most sexy findings -- especially in the area of biology today. So this is a situation…

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WR: So I think that this is a period in which essentially the character of MIT changed, both in terms of being a university -- because of the range of things that it has supported in terms of work, and so on -- and it had become a mainly government-supported because we didn't have the endowment -- and nevertheless, we wanted to essentially have academic freedom in every sense of the word. One of the things that, as chairman of the faculty I felt was rather important that I serve on, was a committee that was called Faculty Administration. And that dealt with some of these tough things, but there we discussed the problems that would come up in faculty meeting or even the things that the Corporation thought that they had a particular hand in. Now let me say a couple of things. MIT had a rule that faculty were encouraged to spend one day consulting. That meant that they would be a consultant to an outside organization, but they couldn't spend more than one day a week. And that was something which some people didn't honor -- it was honored more in the breach than in reality. And I served on that committee and I learned a lot about these matters. I think it still exists as a committee, but how effective it is -- if somebody from the faculty complained that his department chairman didn't allow him to spend more time or take a leave in order to do that -- these were issues that were brought up there. So I think that as chairman of the faculty I had a unique exposure to what I would consider were sort of crucial parts of the change in the nature of MIT. *Exposure* to -- not conducting, not directing it -- but exposure to, and learned sensitivity to these various matters.

EM: I would like to back you up for a second to Benson Snyder's committee that you referred to earlier where you mentioned that you had student representation and different faculty representation. And I think that that raises an interesting question
with regard to how to form a functional committee at MIT. And I was wondering, having seen so many committees through your years as chair of the faculty, what your opinions were for good and useful committee formation.

WR: Well, I'll tell you, the problem was at that time that Dr. Killian (who was of course not president any more, he was chairman of the board) was willing to do that, but the Academic Council was kind of divided. And I think because Howard Johnson and Wiesner were in favor of trying to do this -- (I mean there were people who felt that even the introduction of Benson Snyder into the Academic Council was a mistake. Shrinks -- you know.) And one needs to compare this to later when Jerry Wiesner was president and I was provost, and we asked Carola Eisenberg to be dean of students. And she, of course, was also a psychiatrist… We had a dean of students even in the Benson Snyder era, but that dean often was opposed to the suggestions that Snyder made. So that was not a period that was easy to get that together. But there was enough pressure from -- the institution was, I think one could say in a majority of faculty and certainly a majority of students, against the war. There was a famous manifestation in Boston which, of course, has so many students in and all around it. There were 250,000 people who marched against the war. And they went down Massachusetts Avenue, and Jerry and I walked with that group. And there were other faculty there. But that was the pressure of the times in universities. And how you put that together is essentially a kind of cocktail like they do a cocktail against AIDS today -- it has various components. And when a committee gets too polarized on one side or the other, you usually let it disappear.

EM: You let the committee disappear?

WR: Yes. The way to do this is not to bring important issues to them anymore, and then they know what the situation is. We tried not to put the top administrators on these committees because that would limit them in what they could do and would limit them in the kind of advice they could give. And if you maintain fairness, you can do that. Otherwise, people would complain, why did Dean (Kenneth) Wadleigh not
appear at the meeting? -- things of that nature. So is that answering your question as well as I can?

EM: Yes.

WR: Okay. Let me see what I have here.. I will say the importance of nominating committees in this situation becomes greater than it was before because the Nominating Committee is the one that makes the ultimate mix of the composition of various committees. The Committee on Discipline became a very important committee in those times.

EM: As chair of the faculty, did you sit on the Nominating Committee?

WR: No. I didn't even know who was on the Nominating Committee, but I think it was Kindleberger who called me and said, Walter -- we know each other reasonably well - - Walter, you have been nominated. Will you accept? He called me on a Sunday morning, if I'm not mistaken. Darling, do you remember?

JR: No.

WR: Well, you didn't know what trouble it would get me into. (laughter) You have listened to this. Is there anything you think I should add?

JR: I don't think you fully answered Eden's question actually about what your own attitude toward these things was as opposed to what was a way of administering well.

WR: Towards what things?

JR: The days of trouble. The war.
WR: Well, I think -- I was opposed, obviously, to the war, and I mean to some extent we had a problem with the war right in our own family. What do you mean? Don't hesitate…

JR: I felt that you were more supportive of the war than anyone else in your family.

WR: I wasn't supportive of the war…

JR: You weren't supportive of the idea of the war, but you were supportive of the idea that now we were in it, we couldn't leave it.

WR: I'm afraid you are right.

JR: So you did occupy an in between position yourself in relation to the forces that were then at play.

WR: I think that's probably very wise, and I'm glad I asked you. I think that -- I mean I was not an extremist in terms of -- either way. I was trying to be a mediator, if I could. But leaning towards how can we get out of this war. I think that's probably fair, isn't it.

JR: Yes.

WR: Glad you said that. There were enough people at MIT who were in some sense for the war that I felt I had to represent fairly too when there were later on demonstrations of students -- of a smaller group. But the March 4th event [March 4th Teach-In] -- we dealt with the question of exams, we dealt with the question whether MIT should be open, teaching. And there were certainly a variety of views on that, and I think at least I leaned into the direction of closing and not holding exams during that time. Also I haven't mentioned the fact that during these years of trouble, as chairman of the faculty, I wore a beeper, yes? And I spent hours on the telephone
with people who called me and especially Constantine Simonides. Isn't that right, honey?

JR: Definitely. (laughter) It's the only time in your life you wore a beeper.

EM: But Judy's comment raises an interesting point. If you are being called upon to serve as a mediator or to represent the faculty, where do you wear your politics?

WR: Well, people knew where I stood. That I was in general leaning against the war.

EM: How did they know this?

WR: Because they had heard me speak in faculty meetings and otherwise. As the chairman of the faculty, even if I'm not chairing it, usually the president would call on me and I would speak out. And, for instance, I spoke out for students being allowed to come to faculty meetings. And so it was that way, but people I think knew where I stood. And they certainly knew where I stood from the weekly meetings, and sometimes more than weekly meetings, of the Academic Council, where when you vote on giving people tenure, you have to say yea or nay. And in general, this is a body in which people have to say yea or nay. So as far as they knew, and some of the deans who were sitting there who didn't agree with my views, and it is from there probably that this became knowledge -- what my views were on these matters..

EM: Why did you feel that we shouldn't abandon the war?

WR: Well, I can't reconstruct that very much, but I felt that -- this is out of the blue right now -- I felt that -- very interesting -- while I was chairman of the faculty, I think or provost, now -- Howard was president, so it was me as chairman of the faculty -- the French prime minister came and Howard invited him and me to a luncheon. And the French prime minister -- I can't remember his name right now -- told us what the war in Indochina was for the French. And he told us also that you can't win such a war,
but you can't give up either because the whole culture would disintegrate. And, of course, the military had a great deal of influence in France and also in this country, and I don't know how -- I mean I wasn't alone to be in that position. I think that Walter Lippmann was that way, and of course that was the position of (Lyndon) Johnson. And don't forget, I had been the co-chairman of the Committee of Scientists and Engineers for Johnson and Humphrey. And Humphrey had the same problems I had. Right, Judy?

JR: As I recall. I think both the fact that there was so much defense work or people interested in defense matters at MIT that the point of view of the military -- feeling that one could not get out of the war -- had an influence on a lot of people who were not total radicals, yourself included.

WR: Well, certainly I was in favor of our pushing the Draper Lab out from MIT.

JR: That's a different issue though. That's saying that you don't want somebody that manufactures war equipment on the campus of MIT and bearing MIT's label.

WR: That's what today the students say about companies that buy the logo of the university.

EM: Companies buy the logo of the university?

JR: To produce stuff that's sold -- sweat shirts, t-shirts, jackets, helmets.

WR: But there is a big fight now at Stanford -- whether during basketball games all these people who support Stanford should be there when they are viewed on TV or should they only be for TV, but not while the game is going on. These are kind of similar things as to how does one stay a university. Just as MIT felt that it couldn't…

JR: But lives aren't involved in the latter.
EM: The stakes are much lower…

WR: Well, the stakes are much lower…

JR: It's money, not life.

WR: …but they are also things that have to do with the condition of workers in those companies, which is close to life.

EM: But I think this raises another interesting point. Just as there were people who were radicalized and were against the war, there were those who were benefiting from increased defense contracts or money coming into their labs.

WR: Well, that may have been, but I think there was little of that at MIT, if any. Lincoln was obviously -- Lincoln and Draper were the two labs where the money was essentially showing the temperature of the war. But not the campus because the military didn't want to support unclassified stuff. That was true right after the Second World War when I went into RLE. [JR thinks this is not correct. Military gave large unrestricted grants, as she thinks WR says elsewhere.] That was possible then because there was not yet any NSF or NIH. But in that period they had been in between the Korean War and so this was in some sense -- the level of support for things was measuring the temperature of that. But I'm glad, Judy, you brought that up. You said that I was the least radical in our family. That's true, isn't it? How about Sandy?

JR: She was less political at that time, I think, than the rest of us.

WR: Yes.

JR: But your son and I were very opposed.
WR: But we have lived together through that difficult period like we have lived through other difficult periods. On the bringing up of kids, I was too strict and probably unreasonably so. Well, you don't need that, but nevertheless…

EM: How do you think -- I'm going to use the word compartmentalization, but I don't know if that's the right word -- but in terms of the main MIT campus, then there's Draper and then there's Lincoln. How do you think this configuration affected the student activity or the protest activity that occurred on campus?

WR: Well, it's clear that Lincoln was far enough away that the students were not that much influenced and didn't know so much what they did. And Draper was a couple of streets over, and the real attack was against Draper. And I think that Draper is a very interesting thing. Draper as a person, he tried also to talk to the students, and he was very clever in doing that. But, you know, he was the one who essentially put together the way planes fly around the world. He was originally in psychology at Stanford and then came to MIT and became quite a figure. And that started during the Second World War when people were in favor of war. And I think to some extent, having been in favor of that war, even though there were lots of isolationists who were against it. That carried over to me and in a somewhat different way to you and Ron. You basically started out as a pacifist.

JR: But I became in favor of World War II.

WR: Not easily.

JR: But that had nothing to do with the conditions of the Vietnam War, as far as I was concerned. And I wasn't influenced by the same influences, we would say establishment influences, that you were at MIT..

WR: Now you hit me. (laughter)
JR: But the issue of quitting the war finally was only solved by just saying, goodbye, we're through. There wasn't a way to end it otherwise.

WR: Well, I couldn't imagine that.

JR: You were perhaps, as a foreigner, a more patriotic American who couldn't see the U.S. being defeated.

WR: Not a bad thought. This country had done a good deal by keeping me here, and so on. But I think that that was probably one of the motivations. But the chairman of the faculty is basically a figure that can just keep order or wash the dishes of the faculty, or can have a real influence, and when he or she has a real influence, I think this comes at the cost of sort of being a person who is fair and balanced. And I think that's perhaps a significant component of being chairman of the faculty. Or if you're dealing with issues that are I would say strictly educational, then there is still a question of whether you want to have change or no change. And when you have change, how much change do you want to have.

EM: So if I hear you correctly, being fair can get in the way of actually implementing change.

WR: Being fair demands that you get enough of the faculty convinced that a new program is worthwhile or a change in the curriculum is worthwhile. MIT had two aspects of its education that didn't change: namely, you had required courses, and we never gave that up. We gave up how much was required -- how much chemistry, or so on -- and the required courses were a continuous debate.

JR: Ungraded freshman year came out of the that.
WR: Yes. And also the thing that Professor Margaret MacVicar started: UROP (Undergraduate Research Opportunities Program) came out of that. Now UROP became very much accepted, but I remember other things that were educational. The chairman of the chemistry department in faculty meeting once accused me -- he said, I don’t trust you, Rosenblith, because you speak too well.

EM: What do you think he meant by that?

WR: Well, that I had a certain facility with words, which today I don't have in the same way. He was not trusting, especially later on when, not as chairman, but as provost, I defended new programs such as Health Sciences and Technology, and also STS (Science, Technology, and Society). The engineers felt that these were too flowery words that we used, and I in particular. So they expressed that as a distrust. And I suspect to some extent they were saying that it was not easily said that I was either that or that. Just as, even though I was an engineer, the engineers didn't really think that I was a real engineer. The physicists -- it's interesting. They always trusted me because I had good friends in physics, and Vickie Weisskopf came from Vienna, as I did. He was a little older than me. And I think he in some sense was the dominant figure of the Department of Physics, and I have had to this day quite a few friends in physics.

EM: Were there any other ways that you were able to convince people of your opinions in committee matters?

WR: What do you have in mind? I don't understand quite the question.

EM: We were talking about the difference between fairness and having people see your opinion and having change implemented. And one thing that always interests me is how people go about convincing other people to see their way.
WR: Well, I think that's what the chairman of chemical engineering thought -- that I had a facility with language and I used language. As long as I was not provost, I had no money to give people. My coin was talking. All right?

EM: Yes.

WR: I think that's probably enough on the chairman.

EM: So we're up to 1969 then.

WR: We want a correction: UROP came out of (Margaret) MacVicar, who was a physicist and invented the UROP program. You have heard about this, I'm quite sure. And together with Al Hill.

JR: Paul?

WR: No. And Paul Gray later on. And I think UROP created a great deal of interest. It was one of those things that was supported very quickly because for the first time we had found a way of having students work in laboratories. And that helped the faculty who had no teaching research assistants when they were undergraduates, and it helped the students have a hand on work. Real work. So that was one of the big discussions. I have to look back when it was established. And the woman, Margaret MacVicar, died of cancer in the early 40's of her life. That was a terrible thing. Because of all the educational innovations that we made, that was the one that took the most, and after a while you didn't have to convince people.

TAPe Seven, Side One

EM: Today is July 26, 2000. My name is Eden Miller, and I am continuing my conversation with Walter and Judy Rosenblith regarding Walter's career at MIT as chairman of the faculty, associate provost, and provost.
Didn't Edwin Land have something to do with the UROP program?

WR: Well, Edwin Land is a complex figure. A genius but a very, very complex figure. He didn't finish Harvard, and he invented Polaroid, as it came to be called. But the complicated thing of Polaroid is too much to go into. But Edwin Land gave a lecture at MIT. We called him a visiting professor -- a visiting Institute Professor even at some stage. He gave a lecture at MIT in which essentially he said, “The trouble is that people have to do something practical,” which he had done by leaving academe at an early stage and getting his hands on the real things, as he said. And the Edwin Land lecture that he gave had a lot to do with it and it may well be that MacVicar got her inspiration from that. That I can't really... I was not close to Edwin Land though I sometimes went to have breakfast with him in that building right next to MIT in which the computer laboratory is. He had an office in that building and he had some cooks that he had imported from Europe. And he gave fabulous breakfasts.. And to be at a breakfast with Land was comparable in some sense to being at a supper seminar with Wiener because it stirred you up.

EM: Who all did he invite to his breakfasts?

WR: Well, not many people. But if you look at Killian's book, he is full of admiration for Land. Of course, Land's Polaroid later broke down, but there is left a laboratory near MIT in which some people that he hired -- he hired people for a while for that laboratory who had not had an academic education as such. He hired a lot of young women from Smith. And [Victor] McElheny, who shares my office now at MIT, has written a book about Land. But I think MIT is not very excited about this. People don't know anymore who Land was, to some extent. And I think that the UROP is something that exists still every day, but Land is again going into the darker past. And he invited -- he had some people on the faculty. He got into a fight with academe when he thought that he had also understood how vision worked. And the people who worked in vision didn't think so at all. So there were a variety of reasons. But I
think I would like to at least suggest that you might read what Killian says about Land.

EM: I've read a good deal of what Killian says about Land in his book.

WR: But Land gave money -- if Jerry Wiesner said that this was a subject to support, Land and Wiesner talked, and Land gave money. They trusted each other. I think that Land played an important role at MIT in that period. Today, I wonder whether the catalog of MIT even has a mention of him. I would suspect not. Have you seen the book that came out of MIT that Wylie published?¹ There are a lot of pictures. Well, we have it upstairs and we'll show it to you.

EM: Shall we move on to your years as provost?

WR: Yes. Well, the first problem was that I was 65 in '78, and Wiesner had already been selected to be president. So I was chairman from '67 to '69, and in '69 the question was what do you do with ex-chairman? There had never been a very strong pattern for this. I think most ex-chairmen just went back to being professors. And Wiesner persuaded the Corporation -- he was provost then -- persuaded the Corporation that they should make me associate provost for a couple of years. And I don't know -- were you opposed to that? Were you away in Hawaii at that time?

JR: Yes to both.

EM: Why were you opposed to it?

JR: I was opposed to administrators. I was pro-science. It meant he wasn't going back to his laboratory and doing science.

EM: That was a question I had for you as well, which is why you decided to give up your research to take a more administrative track.

WR: Well, I tell you that I was persuaded by Jerry. He said, look, you have done all these things; you know the whole place. Why don't you -- and it wasn't easy to do this. He had to persuade the Corporation that I should be associate provost, and I think at that time it's fair to say the Corporation was not entirely free of prejudice. But I think we have a letter that he wrote. For two years it was clear already that Howard Johnson wouldn't continue, and they would select a president and it was a question of whether Jerry would become president or Gordon Brown might become president. And the Corporation was split on that issue. And so Jerry persuaded the Corporation and me. He said, you have made such an investment in the place. You know this place very well. And he said, why don't you do it. I said, well, I built up a big laboratory and I should go back there. He said, well, that laboratory will go on in RLE. And Judy has told you why she was opposed to it. And she has been opposed to this for quite a while afterwards. And the fact is that, like differences on upbringing and difference on the war, our marriage has marvelously survived.

JR: I became reconciled to his being a provost and having a certain kind of power when I saw the degree to which he and Jerry were changing the status of women on the faculty of MIT. That was the first thing that reconciled me to his having that role.

EM: What did you do to change the status of women on the faculty?

WR: Well, we didn't do a permanent job, but the question was, if women came up for appointments in the Academic Council, we both spoke up -- as a faculty chairman, I spoke up on general issues. But we made it a point in the discussions of the Academic Council to speak up for that, and I will say that Paul Gray, who was at that time also assistant provost, supported that. So we were three people to do that, and then we went out and started to advertise for women. [JR: I would like to add another feature. If a department made a search and ranked several candidates choosing a
male as number 1, they might be asked to justify why he was better than the woman who was ranked 2 or 3.] But it turns out, as the Birgenau report later showed, that we didn't change the internal customs of the departments. They still had no space -- not as much space as they should have -- and they didn't have power from the chairmanship of committees and departments.

EM: Now weren't you in charge of allocation of space?

WR: I was in charge of allocation of space at the level of a big program. I was the chairman of the Space Committee, but not for individual professors. That wasn't my level. The level was when people from departments or schools came -- we had weekly Space Committee meetings, and the deans were in on that, and the people who had to do with building aspects, and also the people who knew something about what was happening in the adjoining areas. But individuals we never dealt with -- at least to my memory we never dealt with space for a single individual. If I needed space for CBL, the Communications Biophysics Laboratory, I went to the director of RLE and that's where I got the space for that. There were these levels of space power. So in the years when I was an associate provost people were less certain as to what my role really was. It hadn't existed before. We had had provosts, but not associate or assistant provosts. Paul Gray dealt mainly with educational things, but I dealt mainly with programmatic issues, like new programs. I don't know whether it was that year or one of those two years, but I defended to the faculty meeting the formation of the Health Sciences and Technology Program. And that really was sort of going back to the fact that the NIH had tried to give MIT money so it should get into medicine. But the faculty as a whole -- there were individuals who worked with people at MGH and at other hospitals -- but the faculty as a whole said, look, we shouldn't do such things. It will interfere with the things that we have done traditionally. We need to do those well. But then somebody came along who gave MIT a lot of money. And MIT always understood that currency And I think there were enough people -- and there had been the continuous time of going from individuals of the faculty doing something to a program. And I am trying right now
to write whatever input I had to the formation of the Health Sciences and Technology Program. And this will be written while -- I hope by the time you [EM] get back from your trip.²

EM: And we should get it on tape. I wanted to return to what you were saying about how Jerry convinced you to be provost. And he said that your lab would still be there. It would run on its own. What else did he say to you?

WR: I think the fact was that he thought that he and I had been friends and we saw the world very much the same way. And I also thought that he -- there were problems where he was in favor of doing certain things, but his time was too splintered already. After he had been in Washington as advisor to Kennedy and then to Johnson, he was more and more divided between Washington and the anti-ABM thing and MIT. When he came back, he became the dean of science. Then he became provost. Howard Johnson became president, I think, in '66. And so all during that period, Howard and Jerry and I were much together because of the problems of politics [academic] and so on. And Jerry felt that Howard Johnson would probably become chairman of the Corporation and that he might become president. [See essay by Willard Johnson in Rosenblith, ed., Jerry Wiesner.] And he felt that I could in some way support that. And he had obviously cut things that had to do with his science and laboratory. I think his students did things all over the map scientifically, and he couldn't keep track of that. And he felt strongly that MIT needed somebody who had made an investment in MIT, in addition to him. And I think that was the thing that persuaded me.

EM: Did you miss your laboratory?

WR: I have missed my laboratories in a variety of ways. But I think that, when the laboratory got as big as it did, I was mainly a person who provided an overall context

for the lab. I didn't do in those years anymore any individual experiments. So in some sense Judy maybe was aware of that.

JR: I had designs on him going back from faculty chair to the laboratory because I had ideas I thought he and I could implement together in the study of newborns.

WR: And that was a disappointment, darling, for you. But fortunately, she was persuaded too. And I think -- the Wiesners and ourselves were good friends, and in some ways we had also become friends to some extent with the Johnsons. And so these were people she respected. And they felt that having made the investment during the period of troubles in MIT, I could do something that neither of them had quite the time to do. So as associate provost, I think I did -- one has to look up the faculty minutes. Linguistics was supposed to become a program, and I was on the committee that was to suggest it to the faculty. I had had contacts with Halle and with Chomsky, and so MIT at that time was not in a sufficient stage of computers to understand that linguistics and computers were strongly related. And the linguists were not persuaded of the whole thing. Chomsky worked on the syntax of grammar. Halle worked on the phonetics of language. So it wasn't clear how that relation was. But I was persuaded by what I knew about this that this was a program that we should have as a graduate program. Graduate programs needed to be approved by the faculty too. And then. I think. in 1970, we approved the Health Sciences and Technology. And that involved a great deal of our working with Harvard. Instead of doing a medical school, MIT said, there is no sense. Harvard is doing a great thing in terms of medicine, most of it at least, even though there were no women on the faculty at Harvard. The first woman appointed was a skater, wasn't it? An ice skater.

JR: Peggy Fleming?

EM: She was appointed to the faculty?

WR: Of the Harvard Medical School.
EM: Really?

WR: Yes, she was an M.D. after all. There had been women probably in the previous century. And so when Harvard Medical School's dean, Ebert, came to MIT -- and he knew Jerry Wiesner because Jerry Wiesner had served on the advisory committee to the director of NIH and also to the advisory committee of MGH -- and said, my faculty says we need the kind of competence that MIT has in engineering and in mathematics, we put together, with great resistance on the part of the Harvard Medical faculty and less resistance at MIT, but it still was my task to do that, and on the Administrator's Committee, which had the greatest influence on the structuring of the Health Sciences and Technology, I sat as a representative of MIT. So in some sense that creation replaced for me the immediacy of the laboratory. I must say, you will see that when I have written it -- I should have written it long ago. Then what happened is the National Academy of Sciences, the president, appointed me to a new board that he created. It was called the Board on Medicine. There were twenty people on it, and I was the only engineer. And that sort of gave me some -- how shall I say -- new area of creativity because it turned out to be -- it became the Institute of Medicine, which is today very important in this country as advisor to the country as a whole. And on that board I met Irv London. I had this new contact in a broader thing, and there was the politics of the Academy involved. They didn't want to create another Academy. It's only now that they call it the National Academies for all three [science, engineering, and medicine]. So as far as I was concerned, the MIT faculty -- there had been enough contact with medical things, and there was money, so they were willing to go forward, but the fund raising that Dr. Killian committed himself to, together with others, the Harvard Medical faculty didn't want to do that and especially the faculty of Public Health didn't want to do that. They felt that was a competition with them. And at MIT faculty was less resistant to putting HS&T together. But, again, that was one of the jobs that I did as associate provost. So as far as that goes, I must say Judy, who had been an associate of the Harvard Medical School, right?
JR: '61 to '64, I think

WR: You were not enthusiastic about our working with the Harvard Medical School.

JR: Oh, I just told you that their faculties behaved like yours -- We can't give up an hour of that! We wouldn't make a doctor!

WR: Yes. But at MIT there was this as a new program that didn't threaten any particular department. And MIT after the war, with Jerry Wiesner and Norbert Wiener, had tried to do prosthetic devices for people who couldn't hear. Jerry had always been interested in people who had trouble seeing. So there was a tradition in RLE at least, and then in mechanical engineering there was a man named Bob Mann, who when Wiener had fallen and had problems, tried to make a prosthetic device for Wiener. So there was some support for that type of medical research.

EM: What kind of prosthetic device?

WR: Well, I think it was a leg, if I'm not mistaken. No, it was a kind of cane. Well, I'll check that -- what Mann did for Wiener. But it is clear that there was sympathy in a variety of places. There were people who knew about radioactivity. And, of course, medicine started to use radioactive substances more and more.

EM: This is the experiments in the nuclear reactor? Cancer treatment experiments?

WR: Yes. But there were more than those. And I think that that made for a program that MIT -- the engineers thought that fund raising was competing with them most of the time, but not individual engineers, mainly departments, who thought that they needed a lot of money. I think Gordon Brown did not oppose it. Gordon Brown was a powerful figure at MIT. He during the war had been the head of the laboratory that made feedback mechanisms in fire control. So, I mean there are reasons for
everybody. And even though I was not an MIT alum, I was not a person who had been at MIT for a long time, by that time I think people no longer mistrusted me, even if I talked too glibly, they thought. Right, Judy?

And as provost, of course -- Judy didn't want to be ever the wife of an administrator. That was not her cup of tea. But we had parties -- parties of the laboratory that I created, we had parties of a lot of people from all over MIT. And I think this kind of -- huge parties sometimes, 50-60 people who came -- gave me another way of knowing what was going on in the whole place. And I think the provost has to spend his time or her time to understand the structure of academe in a more personal way than just what the department will send in to him saying, we want money for such and such. When I had been chairman of the faculty, I never voted on any salaries. That was important. Even though the proposals for salary raises came from the department heads, and the Academic Council approved or disapproved these, or added further things. So as provost I really spent an enormous amount of time, and that was the thing that Judy was perhaps most unhappy about -- that I spent an enormous amount of time trying to get to know what people were doing and whether these were important academic things or not. I spoke in faculty meetings. I went to all faculty meetings unless I was out of town -- but I spoke to faculty meetings on a variety of topics, and I felt that the faculty needed the perspective of that. Jerry didn't feel about the faculty meetings the same way I did. He had many other fora that he talked to where he was unique. He talked about the ungraded freshman year and things of that nature because he had been a member of the original Lewis Committee. So we divided. As time went on, the associate provost became the provost, and...

TAPE SEVEN, SIDE TWO

JR: At the end of Walter's last comments about becoming provost, I was reminded of the fact that when he took the job he had specified to Jerry and others that no one should expect his wife, who was a professor at Wheaton College at the time, to carry the ordinary activities of a provost's wife as they existed at the time.
WR: Of an administrator's.

JR: Or an administrator's wife, more generally speaking. I often laugh because he continued to tell people that I didn't do that, but in fact in order to see more of my husband, I went to innumerable dinners involving one or another group at MIT that were not exactly what I would have chosen for my social agenda. At one time my daughter remarked to me that one of her memories of me is dashing in from Wheaton College, spending about fifteen minutes on my toilette, and dashing off to an MIT function. When Walter was being replaced as provost, the wife of the incoming provost asked me about being the wife of a provost. And I said, Well, in principle, I don't play the role of an administrator's wife, but in fact I did in terms of attending all of these functions in order to spend more time with Walter. And I think that she listened carefully and decided not to do that herself. She also was a professional woman.

WR: I should maybe, on the provostship, add a couple of pieces here. As time went on, since I had been involved in so many professional organizations and then I was called upon to give lectures more and more because they couldn't always get Jerry because Jerry was busy or elsewhere. And I gave lectures in the United States and even abroad, and that in some sense became the period when I used to travel a great deal -- increasingly so. But it made me in some sense an ambassador of MIT. I talked to alumni of MIT in many countries, in, I remember in particular, France and Japan, but I also, when I went to Indonesia, there were some alumni there, and so on.

JR: Brazil.

WR: Brazil, yes. I talked at the Admiral's Club in Rio -- to the alumni because there had been a lot of admirals who had gone for their education to MIT. So you might even find traces there.
EM: This actually is a question that I wanted to ask you. One of my favorite quotes that I heard about you as I was talking to people is, We never knew Walter's latitude or longitude, but we always knew his altitude. (laughter)

WR: True.

EM: Which suggests the degree of traveling that you were doing during this time, and I was wondering what your perception was of MIT's role in the international community during this time.

WR: Well, I said repeatedly when I came back that people know MIT better than they know the National Academy of Sciences. MIT really was something that people tried to imitate everywhere in some ways. The alumni had made for this, and I think it doesn't always take because just as with the program UROP, it needs a kind of atmosphere, which I think MIT has had at least for the years that I did know it. People always wanted to know, “How do we build another MIT?” And that still is going on today. And very few people say, “How do we build another National Academy?” If we get ever to the problems of the international academies -- we talked about this yesterday with Frank Press -- this is a period where in some ways globalization makes possible things that were impossible earlier internationally. But MIT was international, not global. But now it has, for instance, programs in Japan, it has programs even in Singapore and there are quite a few others. And the MIT clubs of alumni exist in many places -- in Paris, though they were jointly there with Harvard, and in other places they exist too. I think if one looks at the clubs -- the Alumni Association should have a list of clubs. But I think that from the very beginning MIT was a unique place. Harvard was better known because the alumni and the financial status of Harvard was always very different, and MIT, as I have said repeatedly, didn't have endowment. MIT had to live by its wits. And I think the provost's role is to see to it that that happens. And that the wits are applied to the things where MIT can be unique. I'm happy to see that Khoury is trying to make his school [School of Humanities, Arts, and Social Sciences], which is one of the
youngest, into something that has a unique feature too. And I think there are a couple of departments here that are recognized as the best in the country. Larry Bacow has made the connection with Cambridge in England. So MIT is even going further than it used to go. I know when I was asked to talk at the meeting of the Royal Society in England, MIT was still considered as something odd. The Imperial College was, perhaps, the most equivalent in Great Britain at that time. And now I think the connection with England and with Cambridge is because Cambridge in some sense tried to imitate the original Route 128, and our 128 was, in some way, an image of MIT, and of what today is Silicon Valley. And Cambridge has tried to do the same thing. But MIT has this combination of solid engineering science and the entrepreneurial spirit that the whole world seems to try to connect to. And that's hard to connect with the humanities. But unless the humanities and human issues are related to those, we will have something that is inhuman. So that's probably the end of the provost thing.

EM: I would like to push a little more on the question that I just asked you. And I was wondering how when you traveled to all these places around the world, how you presented MIT. What identity did you give the institution?

WR: Well, I think that I started out from the fact that MIT was originally a land-grant college, and when I was provost we received $20,000 every year because that was what the government still gave to the land-grant colleges. So I presented MIT as a land-grant college, which is the equivalent today of a state university in some sense. And I tried to show the evolution of MIT from a land-grant college to something that was leading in engineering but that took a broader and broader view. I think the formula that we have mentioned before, a university polarized around science, technology, and the arts, where the arts were first called the practical things. I tried to represent this and also to show that we had requirements that made MIT a communal thing. MIT, in contrast to Harvard, has one faculty -- all the faculty members from all the schools are in one faculty. Harvard has the separate schools with separate faculties. I forgot an important thing now of chairman that I want to discuss with
you. The original MIT -- the man who founded MIT was a person who wanted MIT to be a very broad thing, and not just something that was useful. And so there were a lot of things that happened in that early period that made it unique, for instance that there were women in the 1870's at MIT as students and even faculty.

And the one thing that I forgot about when I was chairman was the question of the ROTC. Harvard got rid of the ROTC, and many other universities did [in the so-called years of trouble], and MIT didn't. And we had a special committee set up to study it, and they came back and suggested -- this was before we had gotten rid of the Draper Lab and so on -- they suggested that a lot of the poorer students at MIT were essentially living on ROTC support. And so we felt that we didn't want to get only the rich people. And so MIT stuck with the ROTC, and Harvard courageously sent the people who wanted to be in ROTC to MIT.

EM: Even during the late 1960's MIT…?

WR: Yes. We stuck with required courses which we thought -- at least for the first two years were important and we modified within them -- and we stuck with ROTC. These were things that were tough issues. The faculty was obviously split on the ROTC. But I think the argument that it would deprive MIT of financially poor students carried the day.

EM: So looking back on your days as provost. What do you think were your moments of greatest pride?

WR: Well, I think the fact that I had been able to do the provost’s jobs without making enemies of large sections of the community and that I had indeed been instrumental in getting new programs developed. That was what substituted for my laboratory. I mean I have been involved in so many things in my life that I think there is a continuing possibility for creation. I was one of the founders of the Biophysical Society. I was involved in the International Council of Scientific Unions. You see,
that meant all the scientific unions in all the fields, but I wasn't there as a representative of a single field or discipline, I was there as the vice president of this international organization, which was supported at a given time by UNESCO. So I think also in the period of provostship I got more and more involved in terms of international activities, and I guess in some sense the greatest pride was when as an administrator I was elected Institute Professor -- no administrator had been elected Institute Professor while being an administrator. Right, Judy?

JR: Yes. But you didn't talk about the founding of STS.

WR: Yes. At the end of my period as provost, both Jerry and I wanted to do something that was not only putting the humanities in focus but also put something in place that would deal with the problems of science, technology, and society. And that's when we created STS, against great resistance in the faculty. And I think we have maybe mentioned that before -- STS, I guess on the development of STS Jerry and I disagreed. Jerry had very little patience with the scholarly aspects of the social sciences. He wanted to do policy mainly. And I felt that if you wanted to have first class people, we had to have people who would be interested in the STS but from the point of view of being first class in their own approach to it. For instance, I think that Leo Marx is an example of that to me. And Ken Keniston. Leo Marx -- I was still provost and I met with him in London in the Hilton Hotel, and he had been one of the group that was in Amherst College. We had lunch together, and I did some of that business of attracting people to MIT at that stage. And he came to STS and I think he has been first-rate -- Have you met him?

EM: Yes.

WR: He is a first-rate person. In his own field, and he has a view of -- he and I had had big differences of viewpoint on what is progress. And so Jerry, being in some sense a much more engineering, technical approach, got more and more interested in the problem of anti-ABM things and in artificial intelligence. And I always used a phrase
that hasn't been forgiven to me: that I prefer natural stupidity to artificial intelligence. (laughter) That's one of my phrases. And oh, were people angry with me.

EM: I can imagine that ruffled some feathers.

WR: Yes.

JR: And then there's gray capital versus green capital. Gray matter versus money. (laughter)

WR: Yes. I had these -- what do they call these things today on TV, these phrases?

EM: Sound bites.

WR: Sound bites. Yes. Those are my sound bites. And this is probably why I was mistrusted because I did sound bites too often and they were usually phrases that people didn't forget or forgive.

EM: So if you were to give advice to a future provost as to secrets for succeeding in this job, what would you say?

WR: Well, I've seen too many who didn't make it. At least to my way of thinking. My successor, and I'll speak very frankly, is a first-rate physicist, a Nobel-prize quality physicist. But he…

JR: …and a nice man…

WR: …and a very nice man, and his wife was a first-rate dancer. (laughter)

JR: That wasn't her profession.
WR: But he didn't have before he became provost the exposure that I had to MIT. And I think it's not a question of being a provost but it's a question of being a provost in MIT and to MIT. And he was a physicist who stayed a physicist. I don't think he went often to faculty meetings. I think he had a view in which he thought it was easy. First of all, he and the engineers didn't get along. Then there were all the new programs. He once was quoted as saying, as a sound bite, that Wiesner and Rosenblith owed him $20 million that they had wasted on new programs. But that's really off the record. And the next one was John Deutch, and he was a smart guy, but if I can speak off the record, his arrogance was just -- it prevented him from being a kind of provost that I would like. MIT shouldn't -- just because it's so competent, it shouldn't be arrogant. And the next one, Joel Moses, came in at a time when he was a computer maker. And also an engineer. It was a good choice, but I didn't know him enough to make a judgment about it. But he resigned and I don't know whether it was his health or whether he -- I mean you have to have close relationships with the president and the deans, and so on, and I think at the time when he came in, it seemed that computers could solve the problems of the world. But he was the one who, together with the president, called me when they were going to establish the Rosenblith Fellows. And I think the choices they have made, at least from those that I have seen, are first-rate. There is enough of an international flavor and there are enough women there, in my opinion, that I would have wanted to see as a provost. So I can't blame them for having -- I don't want to blame anybody. You might tell the story of how this came about -- when Chuck Vest called. That was in a period when I…

JR: …was not very fully with it. Walter originally said he didn't want to speak to Vest. And I asked if he could call back in five minutes while I explained to Walter that you don't refuse to speak to the president of MIT. And so he spoke to him, and Joel Moses got on the phone also and they asked if he would mind having fifty graduate fellowships named after him. So he decided even then that he didn't mind.
WR: The Corporation had voted the money for it. That's my comment on provosts. The present provost I don't really know. I have been a little too frank on that probably. Now Judy, we need you for the business of the security clearance…

[End of session]