

UNIVERSITY OF MASSACHUSETTS
ORAL HISTORY PROJECT

INTERVIEW with GEORGE A. MARSTON

This interview is with George A. Marston, retired Dean of the School of Engineering of the University of Massachusetts. Mr. Marston is interviewed by Donald W. Cadigan. The interview is being conducted in Whitmore Administration Building on the Amherst campus of the University on Monday, January 24, 1977.

The significance of this interview is that during Dean Marston's tenure the School of Engineering developed from a few assorted engineering-related courses in several different departments to a full- fledged and fully accredited Engineering School.

CADIGAN: Now I thought in the beginning of the conversation, we would begin with a little background material. I know that you are a Connecticut Valley native, came from a town up the valley here, Turners Falls, a section of the town of Montague, but I assume, I'm not sure, but I assume that you went to Turners Falls High School.

MARSTON: I did.

CADIGAN: Did you go directly from Turners Falls High School to Worcester Polytechnic Institute?

MARSTON: I did. I wanted to go to MIT and I frankly did not have the grades. I think there were five or six of us at Turners High that went to Worcester Tech that year and I was the only one that was not Pro Merito in high school.

CADIGAN: Out of the five or six?

Marston: Right. And so I think that was quite an incentive for me to do well a-c Worcester Tech. I had planned to transfer at the end of the first year, but having made my friends there, I backed away from that, but out of that group from Turners that went down there, I say this in modesty, I was the only one that did not flunk a course and graduated in four years.

CADIGAN: Well, that leads me to another thing that I was thinking of over the weekend. You went to college at the time when I think the majority of men who went to college didn't really have a very clear objective. They usually found it in college. But apparently you were interested in engineering from the beginning.

MARSTON: I was because I had, always had, a terrible time with languages. Mathematics was easy and sciences were reasonably good and so there was no question in my

mind, I was not a liberal arts...

CADIGAN: ...Major. I had the same problem with languages. But when you went to Worcester Polytechnic Institute, I don't know how well known it was in those days—certainly since then it has become highly regarded as a fine, small, friendly engineering institution of the highest caliber and widely regarded, I guess, internationally as well as nationally. Did you come directly from there to the University campus?

MARSTON: No. I graduated without a job in 1930. I'd been offered an instructorship at Lehigh University, but I wanted no part of it, of teaching. So within a few weeks, I did get a job with the Turners Falls power company up at Cobble Mountain. They were building Cobble Mountain, the water supply for the city of Springfield and...

CADIGAN: That's in the Barre area, isn't it?

MARSTON: No, outside of Westfield and Mr. Moody was the chief hydraulic engineer there in Turners and he knew my father and they had an opening there and I was the surveyor there and worked there for about six months and then, of course, in 1930 and '31, the depression years, construction slowed down and so I was laid off. And my grandfather was in Florida so I went down there and while I was there, within a month, I got a call that I could come back to the Turners Falls power company and have an office job, and I worked there until February of 1932, which is roughly a year or more. And then, they were laying off, things were really at the bottom at that time, and I was laid off. As I have always said, I wasn't married and didn't have twelve kids, so I didn't have much chance of staying on. But I had worked under Mr. Moody for, on a pumped storage plant up on the, one of the branches of the Westfield River up at Busby Mill and it's interesting that the power company never bought up the rights or never went ahead with that. But they did, eventually, build the pumped storage plant at Northfield Farms and Ferreira [Antonio], who has been the chief hydraulic engineer for Western Mass Electric, is a graduate of the University, and I had him in fluid mechanics, hydraulics, and he tells me my notes are still in the company files.

CADIGAN: Is that right? So they were thinking of that concept of pumped storage many, many, years before they actually came ahead and built one then?

Marston: Right. Moody was a very capable guy, very good engineer. And then, I was probably laid off in December, and by that time I had become quite interested in hydraulic engineering and went on. I went to Wisconsin around the first of February, 1932 on the recommendation of a man from Iowa State, civil engineer, head of the department, who told me that if he knew of anyone interested in hydraulic engineering he would recommend Wisconsin and Danny [Daniel W.] Mead. So I went there in February and that turned out to be Mead's last semester there, so by that time, by June or spring, I knew of Mead's leaving and I was not enthusiastic about Dawson [Francis M.], the man who headed up, or would head up the hydraulic work, and I had heard of the activities at the University of Iowa at Iowa City, so I wrote to them and got an assistantship there at \$57.00 a month, which was quite adequate to keep me, I had a nice room in a private home, and got my meals at a restaurant, and I always had enough money left over so that I could make one trip a month up to Madison, Wisconsin, to see a girlfriend by the name of Grace. I had a 1929 Ford roadster.

CADIGAN: Was this before the Model A?

MARSTON: This was the Model A.

CADIGAN: The first Model A?

MARSTON: It had a rumble seat and so that summer after the semester at Wisconsin, I don't know how personal you want to make this, but I can make it...

CADIGAN: Well, I'll get into sequence of your..., 'cause I hadn't realized you had been all the way out in the Midwest or the far West.

MARSTON: I hadn't been in Madison, Wisconsin two days in February of '32, but what people were stopping me on the street and saying, "You're out for basketball, aren't you?" The only way I got off the hook was to tell them that I was a graduate student.

CADIGAN: How tall are you?

MARSTON: Six feet, five inches and never played basketball.

CADIGAN: No. Played a lot of tennis, though, didn't you?

MARSTON: Yeah, right.

CADIGAN: Well, did you finish up out there at Wisconsin?

MARSTON: No. I went one semester there and then I transferred to the University of Iowa.

CADIGAN: I didn't know that.

MARSTON: I got my Master's in, I think it was June there. I think I took one summer session there as I recall. With my assistantship, I couldn't take too much work. I think it was twelve hours but recognizing that I wasn't going on after the Master's, I wrote to, I wrote all over the country amongst them, to many different schools. By that time, I decided any job...

CADIGAN: Even teaching was ...

MARSTON: Was good. So I got a reply back from John [E. Ostrander]. That was Massachusetts State College in Amherst.

CADIGAN: Now at that time, he was, was he in Chemistry?

MARSTON: No...he was head of the Department of Mathematics and Civil Engineering.

CADIGAN: Then this would have been '32 or '33, somewhere along in there?

MARSTON: Yeah, the spring of '33.

CADIGAN: I didn't realize the Department had been called Mathematics and Civil Engineering. I knew there were a lot of courses over there.

MARSTON: Well, the reason for that I think is this, Don. Ever since the College was founded, there has been at least one engineer on the faculty and Ostrander was within two years of retiring at age seventy and he was, he had an instructorship—I learned about this later, he had this instructorship and of course, as you remember, Dean Machmer was in the Department of Mathematics also.

CADIGAN: Was he in Mathematics and Dean at that time?

- MARSTON: And Dean. And there was a little, perhaps jealousy there and Ostrander was damned if he was going to let Machmer fill that instructorship. He was going to get an engineer. I think [William L.] Machmer wanted to hire George [E.] Aldrich who was finishing up in Mathematics, a very nice guy, and George and I became quite friendly. And so Ostrander, when he got my letter, here was a Midwesterner, apparently, with an engineering degree, a Master's, and he offered me an instructorship at \$1,440 a year.
- CADIGAN: That's \$1,440, that's not \$14,000?
- MARSTON: No, no, \$1,440. One-hundred-twenty dollars a month, and I took it. Boy, I was, it looked big to me in those days!
- CADIGAN: So you came here in the fall of '33.
- MARSTON: I came here in the fall of '33, yes.
- CADIGAN: And I gather that shortly after that Ostrander retired?
- MARSTON: Two years later.
- CADIGAN: And Machmer became head of the Department, didn't he? Or was he Acting Head? I began to show up about that time, a little later, and I never really knew whether he was head of the Department of Mathematics or not?
- MARSTON: I'm not sure, Frank [C.] Moore, of course, took over shortly after that and I don't know whether Machmer was interim Department Head or not, but he had his hands full, of course, over in the Dean's office. And he did continue to teach a couple of courses and I, my work was all in mathematics.
- CADIGAN: I was going to ask you, you taught mathematics, did you also teach any civil engineering at that time?
- MARSTON: Not until Ostrander left. Of course Ostrander was teaching from International Correspondence Course booklets. He was teaching Highways and Surveying and, I guess, Water Supply.

CADIGAN: Now this was really related to the agricultural days of the institution, wasn't it? A hangover from that period when men who had farms had to do some of their own grading and their own cut and fill and build their own roads to the different parts of their farms. Wasn't that the objective of...

MARSTON: Well, having ...

CADIGAN: Having road construction at the...

MARSTON: Well, it may have been. I really don't know. I think Ostrander in his day, in fact, Ostrander was one of the first two faculty members hired by the University of Idaho and he stayed there, I think, only two years before coming to Amherst and he was here over thirty some years. And I think in his time he was a good engineer. Incidentally, you've heard of the firm of Metcalf and Eddy in Boston. Well, Metcalf was on the faculty here two years.

CADIGAN: Is that so?

MARSTON: Yeah, so you can trace the early history of the college and there was always one engineer and apparently a civil engineer and Ostrander was a civil, and Metcalf was a civil, and apparently they had one civil engineer on the faculty here through the years. And the Department of Ag Engineering was formed in, I think, Guinness [Christian I.] Came here in 1914.

CADIGAN: Is that right?

MARSTON: I think so.

CADIGAN: I can remember your telling about living at least one year in North College.

MARSTON: Oh, yes.

CADIGAN: Now I came here as a freshman in 1935, that was the year and I may mention it a little later, and I had you in Mathematics the second semester, I think. I don't remember who I had the first semester, and you had left North College then. But you and Grace lived in North College for at least one year.

MARSTON: Yeah. After, let's see, we lived on Amity Street, and I've always said that was

good place for a newly married couple to start. But I got a job with the Bureau of Reclamation in Denver the summer of '34. We were married in February in New York City on coldest day in the history of the Weather Bureau, and I think it's still the coldest record, February 10th. And...

CADIGAN: I'm glad to see you still remember your anniversary. It's coming up pretty soon.

MARSTON: And so she same then and I got this summer job, although I probably did not indicate definitely that it was a summer job, but I worked on the Boulder or Hoover Dam project that summer, writing articles for the Bureau of Reclamation publications on it, and we had a nice summer in Denver. It's a nice place, ideal city, in a way, or it was then, but I decided that perhaps I would come back and Machmer offered us the apartment in North College to be in charge. There was some lady who had been in charge there before and I think she had enough and he wrote and told us the apartment was partially furnished. We got to Amherst, visited the apartment and found that the furnishing consisted of an old jute rug on the front room. A wooden-armed horsehair leather seated davenport, and there might have been a similar large chair, but that was the furnishings. So I raised the question as to where we were going to eat and I guess Machmer said, "Well you can eat at the Dining Hall." Well, Grace and I soon figured out it wase going to cost us more to eat there than we'd save on rent, so I explained that this was not satisfactory. Well, we definitely had to have some place where we could eat at least, so Machmer took me in to see Mr. Kenny, [Fred C.] The Treasurer and he said that he thought that he could find thirty-five dollars to fix up the apartment and the upshot of that was that he put in a duplex plug in the inner room and they found an old sink down in the scrap pile, I guess, and 'course, the snack bar was in North College at that time and so the piping was right against the wall. Well, they hooked up the sink and put in the duplex plug and I think that took all of thirty-five dollars, and so we got a hot plate and we did have an electric refrigerator and of course there was a bathroom there with a tub, no shower, and we lived there a year.

CADIGAN: I didn't know whether you had been there one year or longer. Well, that was then the year, that must have been '34 or '35.

MARSTON: That was your first year here?

CADIGAN: I came in '35 and I moved into, in there. When I came, you were teaching

mathematics. I can't remember who taught me math in the first semester, but we had you in the second semester over there in the old Mathematics building and I don't know whether at that time, I certainly wasn't aware of it at that time, whether you were teaching any courses in engineering?

MARSTON: No, I wasn't.

CADIGAN: You hadn't started. I came across a note somewhere that in 1935 the Massachusetts Federation of Labor asked that the Massachusetts State College put in some instruction in engineering.

MARSTON: Yes.

CADIGAN: And at that time, that first year, President Baker wasn't too enthusiastic about it and it didn't get anywhere.

MARSTON: Well, I think that, I always felt that Baker was sympathetic with engineering, but money was extremely tight in those days, as evidenced by the salaries, and the Holyoke chapter of one of these labor groups continued to push for engineering here. And of course, the reason for that, Don, as you know, MIT is a land-grant college and they got one-third of the original \$50,000 land grant to the state of Massachusetts. And I've always said that they've done very well with their \$16,666.67 through the years. But engineering was supposed to be handled down there, where the agriculture came to Amherst.

CADIGAN: In other words, the Morrill Act, in which engineering is clearly implied here in Massachusetts as perhaps in contrast to some of the other states, they were going to divide it up, but nevertheless comply with the Act by having two different institutions...

MARSTON: Right.

CADIGAN: Take care of it. Well, now, it wasn't too long after that, that there was established a Department of Engineering here on campus.

MARSTON: Right.

CADIGAN: I guess prior to that time engineering was 'going on in agriculture too.

MARSTON: Yes.

CADIGAN: There were some engineering courses. I don't know whether they had a full major or a department over there, but they had agricultural engineering and they had, you and I guess, John Swenson showed up on the scene somewhere along in there, and you two were in the Department of Mathematics, also teaching Engineering.

MARSTON: Right. And those were combined, I would say around 1939. It was before the war.

CADIGAN: The Trustee vote shows 1938,

MARSTON: All right.

CADIGAN: They were either, either had voted a Department or had, or were talking about it.

MARSTON: Right.

CADIGAN: And Guinness was head of the department.

MARSTON: Right.

CADIGAN: And then I guess that, did you and Swenson move out of Math? Is that when you moved into Stockbridge Hall?

MARSTON: That's right. We went over to Stockbridge Hall and, of course, in Ag Engineering there was Guinness as Head, there was [Miner J.] Markuson who was an architect out of Minnesota, there was Bill [William H.] Tague who was an Ag Engineer out of Iowa State and there were Pushee, George [F] Pushee and [John B.] Baxter Newlon, both of them without degrees. Pushee was doing the carpentering instruction and Baxter Newlon was doing the forge and foundry work. And the teaching load in Ag Engineering was, I would say the majority of the load was probably Stock- bridge, working with the Stockbridge students. Bill Tague worked on engines, tractors and that phase of it.

CADIGAN: Then you took the engineering courses in math, engineering courses that were in the Mathematics Department with you when you went over to Engineering, so that consolidated what little engineering was going on. We didn't have anything like a major in anything in engineering, did we, at that time?

MARSTON: As I recall, when Ostrander left, he was teaching five courses between the two semesters and I took those credit hours, in effect, and we put in mechanics and surveying and highways and I think, water supply, possibly an elementary structures course,

CADIGAN: Was it kinetics? Hydraulics?

MARSTON: Yes. That's Mechanics.

CADIGAN: Apparently, again with reference to the Trustee, notes on the Trustee minutes, when you and John Swenson moved over, you took eighteen new courses in General Engineering as described in the ...

MARSTON: Yeah, O.K.

CADIGAN: And then about that time, and I imagine that's, isn't that the way things stayed until, isn't that about the time that World War II came along?

MARSTON: Right.

CADIGAN: I remember I met you once during World War II on Beacon Street in Boston up near the Fenway. Do you remember that meeting?

MARSTON: I think I do.

CADIGAN: I was walking up the street, I was just wandering around looking" at Boston, I guess. This would have been in the fall. It would have been between the first of August and October of 1941.

MARSTON: I was not in the Service.

CADIGAN: You weren't?

MARSTON: No.

CADIGAN: I thought you were at that time.

MARSTON: I went in September '43.

CADIGAN: You were down in Boston for that.

MARSTON: Yeah, I was probably down there.

CADIGAN: I remember that. Well then, when did you come back from Service, and to what capacity did you come back? I know you came back to the upper third floor of Stockbridge Hall. I guess you found things about as you left them, didn't you?

MARSTON: They hadn't changed a great deal. Of course, I left to go in the Service. I was not drafted and ...

CADIGAN: You volunteered, did you, or did you have Navy contacts?

MARSTON: No, I volunteered and this created a little family dissension because I didn't have to go. I could have stayed here and taught the military students and girls, but I guess it was a case of itchy feet or something. And of course, we did have two children, but Grace never moved out of Amherst during the time I was in Service. But ...

CADIGAN: She built a house while you were gone, didn't she?

MARSTON: She bought a house.

CADIGAN: Bought a house?

MARSTON: One of the smarter investments the Marstons ever made, too.

CADIGAN: You had the one down on Kellogg Avenue for quite a few years, you...

MARSTON: Right, yeah, we were dom1 there. That was owned by a lady over in New York state and she wanted to sell during the war years, and it was a case of buying that or Grace moving out and trying to find an apartment. But I came back. I would have said I came back in January of '46. I had been in anti-submarine

warfare works and construction, had spent a year in Newfoundland, and then went into damage control, and by that time the war was pretty well over. And I was shipped out to the University of Redlands, a V-12 program and when I got out there, that was a nice assignment really. It was a nice little school in Southern California and I learned who was making the assignments in Washington for our group and suggested that when the Unit folded up at Redlands I thought Dartmouth would be an ideal location. So I was on the faculty at Dartmouth for a couple of months. In fact, I remember attending the installation of President Dickey. I think it was at Dartmouth.

CADIGAN: James Sloane Dickey I believe his name was.

MARSTON: Yeah. So I think I came back here in January of '46 and of course by that time the veterans were coming back and the next two or three or four years were hectic years around here.

CADIGAN: Well, you came back and as you said a little earlier, you found things as far as the curriculum and offerings in Engineering are concerned about the same,

MARSTON: Right.

CADIGAN: But somewhere along there we had veterans, they were back, beginning to come back. I had come back a little ahead of you. I didn't realize that, apparently. I came back the day after New Christmas in '45, and we knew at that time, I think, people that although not too many veterans had shown up on the horizons yet, we knew they were coming because the outlines of the G. I. Bill had become clear and the speculation actually was that many, many thousands more of them would show up here than eventually did. But now to get back to the sequence of the history of our School of Engineering--not long after you came back, the man who headed the Department, Christian Gunness, became ill and was out for, I guess, I don't know if he ever came back or not, did he?

MARSTON: He had a heart attack at a meeting of the Department on the third floor of Stockbridge Hall and I can remember that so distinctly. I had never seen a person have a heart attack before, and he was over in the hospital and the statement was made that if he got through the next ten days he would probably make it, but he didn't.

CADIGAN: I remember that. I don't know whether you told me or not. Well, his illness came

somewhere between '46 and '47.

MARSTON: Right.

CADIGAN: But also along about there, the Trustees approved a combination of Agricultural and General Engineering and I guess in the same move, this would have been in June of '47, which is very close to the end of the war which gives an indication of the speed with, that was picking, the things with which things were picking up. They combined Agricultural and General Engineering and approved the addition of Chemical, Electrical and Mechanical. Now, how come, we, after all these years — I realize the pressures that were on, but after all these years, how come we were able to accomplish something so rapidly? Because certainly there must have been, let's say from the end of the war in '45 or '46 to June of '47, all of a sudden we're ready to get up a curriculum in highly technical sciences, Engineering, such as Chemical, Electrical, Mechanical, and I'm assuming that we may have added something to General Engineering and Agricultural at the time. How, did you, you must have been in on that, you must have ... Wasn't that quite a task to do that in such a short period of time?

MARSTON: Yes it was. There's no doubt about that, but also you must recognize, Don, that almost half of the returning veterans wanted Engineering. I have mentioned before, on occasion that at one time Engineering was attracting over 42% of the freshman boys admitted to the Massachusetts State College. And of course today, people can't understand that. So that the pressure from the returning veterans was so great for Engineering that somebody had to take them. And the other Engineering schools in the state and that included MIT and Tufts and Worcester Tech, particularly, they just were swamped, inundated, and they supported us very definitely in the establishment of an Engineering school here at Amherst. And I think that you'll find that the Trustees in their action there established a School of Engineering.

CADIGAN: I think the School of Engineering came a little later.

MARSTON: Well, I'm sure that the Dean's salary, the Dean's position and salary, particularly, came later.

CADIGAN: I have no doubt about that. The, one of the things I've noticed about the private schools is that they have always supported our institution whenever it was in

their interest to do so.

MARSTON: Oh, yeah.

CADIGAN: And have never, I don't, I have some doubts about their altruism in any of the times that they supported the University. Certainly they felt that we would take the heat off on the veteran's situation.

MARSTON: Yes.

CADIGAN: And to the same degree or the same manner they supported the Devens installation which we can come to in a moment or two because I'm sure you had some interest in that and also I noticed that they were very interested in having ROTC, Naval ROTC or Army ROTC or Air Force ROTC in certain nearby and further away private institutions insofar as and so long as it kept their students, their population on campus. So I have no, I'm not too generous in my praise of their support, but also along about this time, just about this time in '46 I believe it was, didn't we become a University?

MARSTON: Yes...

CADIGAN: '46, '47, along about there...

MARSTON: That was in [Ralph A.] Van Meter's time.

CADIGAN: Yeah, because we start out with Massachusetts State College at Fort Devens, and very shortly it became the University of Massachusetts at Fort Devens and I think we become I think we got these things started in the tail end of the Baker administration, the beginning of Van Meter's administration. And one of the programs when they were setting up Fort Devens, one of the first considerations was to prepare people down there for Engineering. Perhaps we better say that the concept of Fort Devens was to give them their first year...

MARSTON: Or two.

CADIGAN: Or the first two years, depending upon the needs of the curriculum, down there at Fort Devens, whereby they could come up and infiltrate into our junior and senior years at the time when attrition had taken care of our population and so forth. My recollection is that engineers came up after one year at Devens.

MARSTON: Yes, I think they did. That was largely because of the curriculum requirements.

CADIGAN: You gave them Engineering Mathematics and you gave them Mechanical Drawing at Devens which were at about, at that time, the only courses different from what almost everyone else in the University took.

MARSTON: Yes. Right.

CADIGAN: In other words, our freshman curriculum, I'm going to ask you if this is different now, our freshman curriculum was pretty much a liberal arts curriculum with the exception of an advanced step or two up in Mathematics and the Mechanical Drawing.

MARSTON: And the Physics, but of course that was also available.

CADIGAN: Yeah, but the Physics didn't, Engineering Physics as such didn't come in for a year or two later, after a while. They started out, as I recall, taking the same basic Physics that the Arts and Sciences kids did and then later on you got together with the Physics Department and I guess probably put the heat on them to give a more specialized course,

MARSTON: Well ...

CADIGAN: What I'm driving at is, in those days, an education in Engineering started out pretty much like a Liberal Arts program and stayed with that, and here on this campus perhaps more than anywhere else. We had a rich enrichment of Arts and Sciences courses that was not characteristic of many engineering schools, and has the temper of the times changed, are things different now?

MARSTON: Well, Don, that point has come up before and my answer to that is this: I think that the strictly Engineering Schools have, through the years, and back at the time you mention there, always had approximately twenty percent of their curriculum in the social sciences and humanities. And they did a good job in those days with that, but at the land-grant schools throughout the country, the, and in particularly in the larger universities, had diversified technical courses and, where the private schools, the strictly Engineering Schools, insisted on twenty percent of their work in the humanities because they knew the engineering student and his characteristics...In the large universities, the

Engineering student was given his choice of electives rather than told that he'd got to take two semesters of economics, two semesters of a foreign language, two semesters, or two years of English, and so forth. He was given free electives. As a result, many of the graduates of those universities, being much more interested in advanced thermodynamics than they were in the second semester economics, they elected that and I think that is where the impression came that Engineering was a narrow education,

CADIGAN: Well, I don't think that you could say that of the curriculum that we had when I was aware of it.

MARSTON: No.

CADIGAN: And I knew people at MIT who, Bat [B. Alden] Thresher, the man I knew best down there who—from the Admissions Office at MIT, and he sat me down one time when I was bragging about our Arts and Sciences in our Engineering curriculum and showed me what they had and they had a very fine program at that time too. So I think that in those days certainly, Engineering was not an uncultured curriculum by any means.

MARSTON: No.

CADIGAN: Have things changed? Or are they still going along with

MARSTON: No, I think now you'll find twenty percent or more of the undergraduate programs in Engineering are in the humanities and social sciences.

CADIGAN: I'm not sure that there's much educational in the humanities and social sciences these days, but that isn't the subject of this interview, I'm sure,

MARSTON: But I could comment on that. Recall, it must have been during Van Meter's years, I was called over to the President's office one day to meet Mr. [Earl J.] McGrath, who was U.S. Commissioner of Education, was that his title?

CADIGAN: Could be, he was in that outfit down there in what later became HEW,

MARSTON: And we got talking—of course he knew that I was Dean of Engineering and he made a most interesting comment. He questioned me on several things that we were doing here and then he said, "You know I think the greatest advances in the

humanities and social sciences are going to be made—

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CADIGAN: You were talking about meeting Mr. McGrath, Commissioner of Education, Department of Education in the Federal Government and his comments on curriculum.

MARSTON: He said that he felt that the greatest advances in the humanities and social sciences would be made because of the pressure put on those areas by the professional schools, referring particularly to Engineering where we give those areas, those subjects, twenty percent of the curriculum and we're very much concerned about our students getting good instruction in economics and psychology, sociology, if they're interested, and the languages and certainly in English, and he said the trouble with the Liberal Arts colleges was that they had four years to do it and there wasn't much pressure on them to improve their curriculum, which I thought was rather interesting.

CADIGAN: I can see it, yeah. I never thought of that before, but I can see it.

MARSTON: I think he was a Liberal Arts college graduate. He certainly wasn't a technical engineer.

CADIGAN: Well beginning in June of '47 when the Trustees began putting in more departments and so forth, obviously we had, we were at the beginning of, in the development of a School of Engineering where we had two problems. The first one, obviously, was to develop a curriculum and to recruit faculty. You must have, you didn't have much more on the staff when you came back from World War II than you had when you left.

MARSTON: No.

CADIGAN: And you were, you were made Acting Head of the Department or Head of the Department in Gunness' absence somewhere along the way?

MARSTON: Yes. As I mentioned, I don't think the position of Dean of Engineering was established until possibly, even '48. But Gunness had died...

CADIGAN: June of '48.

MARSTON: And so I took over. Of course I came back from Service as an assistant professor and I'm not sure even that my rank was increased until about the time that the Dean's position was created, although I think I was made a Department Head. Now whether the salary followed or not is doubtful I think. But anyway, it was basically my responsibility and the atmosphere was very conducive, Don, to the development of Engineering. First of all, there was the veterans' pressure for Engineering training, second, there was the atmosphere on the campus here—was very good, because Van Meter had taken over from Baker and Van Meter had no sons who were engineers. Also, your former superior, Whitey [Marshall O.] Lanphear, in charge of admissions and the registrar's office, had two sons who were engineers. So I always felt that I had a lot of support.

CADIGAN: I feel, certainly the, as you say, the atmosphere was conducive to it because of the orientation that the veterans received toward professional engineering that they saw in the Service and the things that they experienced in the Service and many of them had the equivalent of the shop work that you gave them in your instruction course in the sophomore year. They probably had better in some cases than we could have given them here on the campus. I know also that in addition to developing the curriculum and recruiting, and I am going to be asking about some names in the recruiting of faculty here in a few moments, but it was as early as 1947 that an appropriation was made for an Engineering laboratory and I'm not sure that I know that I can distinguish between these two—but in 1948 an appropriation for a mechanical engineering laboratory...Now in 1947 and 1948 we got money apparently for Gunness, but there was also another laboratory built, wasn't there? Down below the chicken houses?

MARSTON: Opposite the Ag Engineering Shop. That building had been built, Ag Engineering Shop, had been built for Agricultural Engineering and in our war surplus program, which is a fascinating story in itself, we got, as I recall, \$120,000 for the erection of the Engineering Laboratory building opposite the engineering shop. So today, that is a one-story brick concrete-floor structure, but it was built on the foundation for a double E shaped building that was brought up from the Boston Navy Yard and put on that foundation. It was a wooden building...

CADIGAN: Three stories. It was the counterpart of one that became a Liberal Arts annex

over in back of South College. Weren't they almost identical in their design?

MARSTON: They were identical. They were identical. They were three stories high.

CADIGAN: Were they three stories?

MARSTON: Yeah; and they were all wood, tinderbox. Right. And...

CADIGAN: You, were you going to put Chemical Engineering in there?

MARSTON: Yes, we were going to put Chemical Engineering and some of our Mechanical Engineering labs, and Sanitary Engineering...

CADIGAN: I know that you had a large, just before you were ready to open, you had scrounged somewhere or other, a large number of drafting tables.

MARSTON: Right.

CADIGAN: Which we had always been in short supply thereof, and you had gotten ahold of a lot of them and they were all in the building.

MARSTON: Right.

CADIGAN: And then what happened?

MARSTON: Then one night I was asleep and I got a call from Bob Hawley, the Treasurer, and he said, "George, your building is on fire." He woke me up out of a sound sleep and I remember saying, "Well, should I go down?" His reply was, "Well, that's up to you, George." Well, certainly I went down and it was a bitter cold night. I think probably in February, and that building was gone in two or three hours. There was no hope of saving it.

CADIGAN: Mather, in his comments, said it went in twenty minutes.

MARSTON: Well, he may have exaggerated a little, perhaps. He was prone to do that.

CADIGAN: What he was doing was talking to a Legislator and he was talking about how he had to get rid of the Liberal Arts annex which was the same kind of a building,

which was constructed at the same time, and Mather was saying that it wasn't safe to be in because the Engineering building went in twenty minutes and the kid couldn't leap out the third story window in twenty minutes, I remember that night and it, well, I'll tell you why I remember it. I was living at the end, the corner of Lincoln Avenue and Amity Street in Dr. Sullivan's house, and from my apartment I could look straight down Lincoln Avenue, and at that time I was in charge among, in addition to doing admissions work almost exclusively I guess for Devens, veterans admitted to Devens at that time, I was in charge of housing on campus, and we had some Navy surplus buildings—one called Federal Circle.

MARSTON: Right.

CADIGAN: At the corner of Old Hadley Road and Lincoln Avenue, right in line with my line of sight. And then, of course, we had the Commonwealth Circle over at the other place...

MARSTON: County Circle

CADIGAN: County Circle, and of course what I thought immediately when I looked down that street and saw flames in the sky, was alle those women and children, veterans' wives and children in those buildings of ours, and that's why I didn't know whether to come or not. I was almost afraid to. Then when I got down, I saw it wasn't Federal Circle and kept going and I believe I remember standing by you.

MARSTON: Probably...

CADIGAN: I'm not sure Baker wasn't down there, wasn't there that night, in person, wasn't he?

MARSTON: He may have been, I don't remember that.

CADIGAN: But I thought he had retired by then. Well, anyway, it was a big loss because all of the surplus equipment that you had gone all over New England I guess to get, went up in flames. We had veterans headed our way from Devens who had to be accommodated

MARSTON: Right.

CADIGAN: And I believe the morning after the fire there was a meeting in the President's office to decide what do we do now?

MARSTON: Yes, I...

CADIGAN: In terms of what are we going to do. We had planned to use that the next, almost the very next day.

MARSTON: Yes. There was one fortunate thing—the delay in getting equipment that the state purchases has always been an aggravation, but in this particular instance, we had not got the locks for the doors in that Engineering annex, so there was practically nothing in there except glassware, the drafting tables, etc, there was very little personal property there, practically none. I think one or two of the students did lose some things, but there was practically none because there was no security there and yes, I'm sure that we must have had a meeting the next day in the President's office to decide what we were going to do.

CADIGAN: We had classes scheduled as I remember, to go in there, and decisions had to be made very rapidly. Wasn't there a question. Is to whether to keep some engineers from going to school for a semester, didn't that come into the discussion—we had no place to put them?

MARSTON: It may well have been or keep them at Devens. Of course, Devens always had plenty of buildings down there, but I recall that one semester, and it was probably that coming semester, that we had engineering classes in thirteen different buildings, including the attic of the Dairy building. I taught up in there and...

CADIGAN: That would be Flint Lab, Flint Laboratory.

MARSTON: Flint Lab, right. We were over in Marshall Hall, we were in Draper, we were all over the campus.

CADIGAN: That's what I was going to ask you, that is, within a period of a couple of hours, the solution was found to place students in classes and courses all over the campus. And you had nothing at that time, you were still operating out of Stockbridge Hall.

MARSTON: Right.

CADIGAN: That was the headquarters of Engineering, but at the same time, you had on the drawing board apparently, the design for what later became Guinness Laboratory.

MARSTON: We were working on that.

CADIGAN: Because the appropriation was approved apparently in 1948.

MARSTON: That was probably about \$280,000.

CADIGAN: That was a bargain, wasn't it?

MARSTON: It sure was, in planning that building, too, Don, our comment to the architect, and of course that was Mr. [W. Cornell] Appleton was, "We've got to get laboratories." So there were only two classrooms in Guinness Laboratory building, a one-story brick building and all the rest were laboratories. Some of them were...

CADIGAN: Some of them were specialized laboratories, weren't they, rather than hydraulics...

MARSTON: Well, they were Internal Combustion, Hydraulics, Materials, Electrical Machinery, Electronics, Air Conditioning, Heating and I think that was about it.

CADIGAN: But they required special design for the purposes for which they were to be used.

MARSTON: Oh, yes, very definitely.

CADIGAN: This was the first time we had ever done this on campus, wasn't it?

MARSTON: Right. The only other laboratory building might be considered that was the Engineering Shop, the Agricultural Engineering Shop and of course, that had primarily carpenter work, forge and foundry and tractor maintenance.

- CADIGAN: Do you recall the name of Appleton's firm? He was a Holyoke man, wasn't he? Was he the Holyoke architect?
- MARSTON: No, he was from Boston, [W.] Cornell Appleton. He was an MIT graduate, architect, and probably at that time he was in his seventies. It was the firm of Appleton and Stearns. Stearns had died and Mr. Appleton and his draftsman were the only individuals in the office and I've always said that we were fortunate in having selected him, I can tell you how we happened to select him.
- Hall [C.] Nichols was with the Division of Building Construction George [Brehm] and I went down to see Hall Nichols about the recommendation of an architect for the buildings and I remember Hall Nichols saying—our question was, "Who is the best architect that we can get in Massachusetts?" And he said, "Well," he said, "If I had to answer that question I would suggest Appleton and Stearns or, I don't recall the firm, Don, but it was the architect who did the beautiful buildings at Boston College. But they had some beautiful stone buildings, really very fine architect. As I recall the name was Walsh, but I couldn't be sure of that and...
- CADIGAN: That would go with Boston College.
- MARSTON: Yes. Then I learned that Appleton had done some work at Worcester Tech and I checked with A.J. Knight, who was in charge of Buildings and Grounds there, and he said that Appleton was very good and that's all that we needed. And the recommendation went to the Trustees and they approved it and Appleton agreed to it.
- CADIGAN: Well, now, was there any problem with political interests in selecting architects in those days? You went to Hall Nichols who was head of the Division of Building Construction. In those days did the Division of Building Construction do the supervising of all of our construction the way they have since?
- MARSTON: Yes.
- CADIGAN: With little influence or control from the outside?
- MARSTON: Yes, I think that's fair to say. They approved the plans after they were drawn up by the architect, but Appleton was a meticulous workman and did the work himself with his draftsman, as I say, this draftsman was about the same age as

Appleton, and I know that when he retired he was the oldest commuter on the New Haven division coming into South Station from Taunton for over fifty years. But...

CADIGAN: Well, also, I guess Hall Nichols, I didn't know him. I met him only once and it was the day, the last day on the job for him and a new man was coming in, was assisting him. But I met him only once and I met him in connection with the Community College buildings at Cape Cod. They had a building there that the chairman of my board when I was with the Community Colleges wanted to take over, and I felt that it wasn't sound and wouldn't be worth putting the money into, and I was after BBC to, you know, either to confirm my suspicions or the rumors that I had heard and so forth. But I understand Hall Nichols was a very fine person to work with. That has not always been true in the relationships with now the Bureau of Building Construction. There's been, it has not always gone smoothly with us, but apparently in those days, you had mutual trust with your architect and you didn't have any difficulty getting the architect you wanted. Nobody interceded and said, "Well, you're going to take whom we say."

MARSTON: No. Apparently not. I think that with the backing of the, Hall Nichols, and the recommendation of course from the President to the Trustees that there seemed to be no problem and certainly Appleton, having done work with Worcester Tech, I think that people just couldn't object to it.

CADIGAN: You had then, by this time you had the Engineering laboratory. I can't remember what we called that, the one that was beside the Agricultural Engineering laboratory. It went where the building that burned was...

MARSTON: I think that we called that the Engineering Laboratory building.

CADIGAN: Yeah. Then we had the Mechanical Engineering Laboratory which was later named Gunness.

MARSTON: That was named Gunness.

CADIGAN: And so at this time, that we are talking about in 1947 and '48, we had two buildings in the process or up. Did you move your headquarters from Stockbridge into the, into Gunness?

MARSTON: No, I never left Stockbridge.

CADIGAN: Until the main building was done.

MARSTON: Until the main building was done, yes.

CADIGAN: Then in the meantime, you were beginning to get some departmentalization in your department over there. By this time, you were, as far as I can see, you may have been acting Dean, but apparently your appointment as Dean was in June of '48, at the Trustees meeting of June '48. In the meantime the Devens veterans were flowing in, and things were- moving pretty heavily here. But you began to departmentalize a little bit. You had Agricultural Engineering under Herb [Herbert N.] Stapleton.

MARSTON: Right.

CADIGAN: And you had Electrical Engineering under Bob [Robert R.] Brown, and Mechanical Engineering under Maurice [E.] Bates.

MARSTON: Right.

CADIGAN: I don't know as you started in with Chemical right away and you took over Civil Engineering, the supervision of Civil Engineering. Do you have any recollections about recruiting—the problems of recruiting in those days? Everybody was going engineering, high-wide and handsome, weren't they, all over the country?

MARSTON: Yes, they were and it was extremely difficult to get engineering faculty and I have always said that we were very fortunate in being located in Amherst. As you say, one of my jobs was to recruit faculty and I remember I used to put ads in the Journal of Engineering Education—"Small, developing Engineering School in attractive New England college town", and that was enough to attract some excellent people. I recall that where we might have three applicants for a position, Frank [P.] Rand, over in English or in the Humanities, might have one-hundred. Perhaps I was a little prejudiced, but I always felt that we got better quality than perhaps he did. We didn't always get the people with PhD's because in those days, the number of engineers with PhD's was quite limited and, but we got some excellent people. You've named some—Herb Stapleton headed up Ag Engineering and Maurice Bates in Mechanical Engineering. Maurice Bates came

to us from McGraw-Hill Publications.

CADIGAN: I didn't know that.

MARSTON: And he had graduated at the top of his University class at the University of Michigan. In fact, he had at one time gone to the Philippines and taught in a prep school. He was planning to go on to China, I believe.

CADIGAN: I did not know that.

MARSTON: And the Japanese invasion killed that, and he was in the Philippines and I think he had John Eisenhower as a student in the prep school there. Bob Brown was a very capable person. He came to us from North Carolina State. He had personal problems, but Bob Brown was a very capable person and did a lot for us—the development of the Electrical Engineering program, and we were fortunate in two other men that I'd like to mention. One was Chester [E.] Wolowicz in Mechanical Engineering. He was a fantastic worker. I've never seen a person that worked harder than he did, and also Norm [Norman E.] Wilson, skinning wires, getting ready for a lab the following week. And of course, we didn't have enough technicians to keep up with everything and the faculty were working, well, almost day and night and weekends...

CADIGAN: Your technician retired about this time. Pushee retired somewhere along in here. Baxter Newlon, who retired to make wrought iron artifacts up on North Pleasant Street retired about that time and you didn't have much, much help. Did you have any of the, any problem in terms of our salary structure in attracting people?

MARSTON: Yes.

CADIGAN: In the early days, this was before we began to, when Mather shook things up a little bit with his Freedom Bill, but before that you had no flexibility whatever.

MARSTON: No flexibility. We had to bring them in at the bottom of the salary scale for the rank and the scales were low; certainly much lower than private practice. But because of that, we got people who were interested in teaching. Those days, we weren't recruiting research people.

CADIGAN: I was just going to ask that.

MARSTON: They were teachers. They wanted to...

CADIGAN: This was -the time when the research fetish was beginning to shew itself on campus, wasn't it?

MARSTON: Later on, Don.

CADIGAN: A little later?

MARSTON: Yeah. Up until, oh '55, we had our hands full. There are two things I want to mention before I forget them. We mentioned the fire that burned the wooden building there, the Engineering Laboratories Building before we really moved into it--that did more to bring us sympathy from all over the northeast. I don't think there was an Engineering School in the northeast that didn't know about our fire and I remember...

CADIGAN: It was a great fire.

MARSTON: It was a great fire, it was...

CADIGAN: It was better than the Abbey when that burned down.

MARSTON: Oh, much better because it all went up at once.

CADIGAN: It sure did.

MARSTON: But, whenever I went down to New York to the Public Works Administration to get war surplus, it was known that "he's from the University of Massachusetts, and they had a fire that burned up all their equipment."

CADIGAN: They need all the help they can get, huh?

MARSTON: And they need all the help they can get and really, I recall so distinctly having to prepare, and certainly the faculty—Maurice Bates and Brown and Nam Wilson and Chester Wolowicz, and so forth, worked on this, but we had to prepare a finding of need. This was a volume, over an inch thick that we submitted to

Public Works in New York to get surplus and they approved things. And we were bringing stuff in here, fantastic amounts. We'd get a half a carload of electronics stuff and Frank [Francis J.] Teahan would remember those war surplus days.

CADIGAN: Frank was our Director of Purchasing. I imagine that you also brought in, if your experience was anything like my Air Force recovery program days, your boys would go out and bring in a lot of stuff you couldn't use.

MARSTON: That is true, but we made a practice of sending somebody to the Supply Depot if we could, to look at the material before we brought it to the campus. I recall speaking before the Trustees down in Boston one time, Van Meter asked me to go down—and commenting at that meeting that of course World War II had been created primarily to bring equipment to MIT and Harvard, but nevertheless, we did reasonably well from what was left.

CADIGAN: I found out in our Air Force recovery program that I couldn't trust the people we sent out and then there was the famous story when I was with the Community Colleges. They used to go out to somewhere near Taunton or Brockton somewhere to a depot up there...

MARSTON: Camp Myles Standish.

CADIGAN: Somebody from Cape Cod Community College went up and they saw this gadget which was, oh, about the size of the traditional breadbox, I guess, that you hear referred to. Nobody knew what it was, but it was evaluated at on the inventory, at something like \$20,000 or something of this sort, but nobody knew what it was. So somebody picked it up and brought it down to Cape Cod Community College and the President then, Irving Bartlett, was a little bit irate at it. So on the next trip, they went up and they got a glass case to put it in and it was in the lobby, entrance lobby and nobody knew what the damned thing was, but it was worth \$20,000. It was something that would never be used outside of the military and was probably obsolete by that time. But we had experiences like that.

MARSTON: Incidentally, I laid out the railroad yards at Camp Myles Standish.

CADIGAN: Is that so?

MARSTON: I worked down...

CADIGAN: While you were in the Navy?

MARSTON: No, this was before I went into the Service. It was the summer of '42, Harold [D.] Boutelle and I went down and we had three engineering students—Dave Wright, George Zewski and Dave McEwen, with us, and we laid out the railroad yards, with another survey party, that whole warehouse and embarkation area.

CADIGAN: That isn't too far from that Naval Air Station where they had the big blimp hangar, is it? That's in Weymouth, though, I guess.

MARSTON: Weymouth, over there. But another thing that might be of amusing incident—I recall that at a faculty meeting at Bowker Auditorium that Van Meter asked me to comment on the war surplus situation, and by that time we were head over heels in that and we were trying to get stuff for bacteriology and zoology and all the other departments—physics, that could use equipment. And in discussing it, I recall commenting that there was only thing that I couldn't find in war surplus and that was aspirin.

CADIGAN: And what you could use.

MARSTON: Right.

CADIGAN: Now, we've talked a little bit about the development of the curriculum and the beginning of the capital outlay program for Engineering, which I'd like to come back to a little in a few moments. But it was as early as 1950, I think, as near as I could find out, that we were first recognized, and I don't know what curricula, by the Engineering Council for Professional Development.

Marston: Our first curriculum accredited was Civil Engineering, and I think. That was in 1949, and 1950. Electrical and Mechanical, and the Mechanical had an Industrial Engineering option, and I think that those four were accredited by ECPD, Civil in 49 and other three or two with the option. Chemical Engineering started in Chemistry. I recall telling...

CADIGAN: It had to. We burned the building down!

MARSTON: Well, we lost a lot of glassware there certainly in that building. But also, I recall a meeting with [Ralph A.] Van Meter and we discussed Chemical Engineering and Dr. [Walter S.] Ritchie out of Chemistry was rather insistent that they could develop the Chemical Engineering, and certainly at that time, we had our hands full...

CADIGAN: And they had, certainly had an edge on you in equipment and in faculty, and in the laboratories and everything else.

MARSTON: Oh, yes, laboratories, etc., but later on, he hired, Ritchie hired [Edgar E.] Lindsey from Tennessee. His wife was a New Englander. Ernie is from Georgia.

CADIGAN: That's Ernest Lindsey. We've had several Lindseys on the campus.

MARSTON: That's right. It's Edgar ...

CADIGAN: Including Whispering Joe [Joseph B.]. Did you ever know Whispering Joe?

MARSTON: Right. I knew him. Yes, this is Edgar Ernest Lindsey, and he came up, I think he came up as an assistant professor from Tennessee, but his wife was a New Englander and I think that's why he came, and Ritchie may have hired Ken [Kenneth D.] Cashin also. But before Chemical Engineering was accredited, and that was probably along '54 or '55, it became evident that it had to be in Engineering and so it did come in with us,

CADIGAN: You're not waving your flag here wildly enough. What I was trying to get at is the fact that when you came back from World War II in 19-16, there was practically a 1920-style collection of courses that didn't lead to much of anywhere, but there were courses in the area of Engineering combined out of Agricultural Engineering and Mathematics, and from 1946 to 1950. For a department to advance as rapidly, or a School to advance as rapidly as to become accredited, recognized by what I've always gathered was a very, very high standard of operation, the Engineering Council for Professional Development, wasn't too easy to, wasn't too easy to get recognized. Yet, in a short period of four years, here at our little agricultural college out in the western part of Massachusetts, a great progress has been made, hasn't it? And didn't you, you must have, we didn't even have too much in the way of buildings at that time. We may have had promise of some, of some to come.

MARSTON: Right. No, I think people were very generous. The approach we took was that as we began to get faculty in here, and I've mentioned Brown, Bates and Wolowicz and Wilson. As perhaps another good example, John [H.] Dittfach had graduated of the University of Minnesota—he'd spent time In-Service as an instructor at Fort Belvoir and he liked teaching, found he liked teaching, and when he got out, he was interested in getting a job in a college.

CADIGAN: Fort Belvoir, the Chemical Engineering, now that was ...

MARSTON: The Engineering, the Corps...

CADIGAN: Corps of Engineering.

MARSTON: Corps of Engineering, and I remembered that somehow we got in contact. He may have written me or I may have seen his ad, but anyway, he came on from Minneapolis at his own expense. We were in no position to pay his travelling expenses for anyone to come and look us over. But I did stress that I felt that everybody was interested in a job with us should come and certainly see our situation. And he came and liked what he saw, apparently. I remember talking with him. He talked with Maurice Bates and he liked the area and he came and I think at that time his salary, and many of these positions, Don, were temporary, they weren't even permanent. I think he came for around \$3,400 a year.

CADIGAN: I can remember when he came because I think you brought him over and introduced him to us. He came about the same time as Karl [N.] Hendrickson, didn't he? Pretty close.

MARSTON: Yes, Karl was another early one.

CADIGAN: And then I think [Carl A.] Keyser was a little later.

MARSTON: Carl was...

CADIGAN: You snatched Keyser out of the Dean's office.

MARSTON: Yes, Machmer hired Carl...

CADIGAN: On your recommendation, wasn't it? Didn't you tell me once you'd submitted his name to Machmer?

MARSTON: I don't recall that, Don.

CADIGAN: I may be wrong.

MARSTON: But, anyway, Carl, and I want to comment on him later, Carl is a terrific guy and Machmer hired him. He had been with a shoe company down in the Worcester area and he didn't like that. And he had a, I think, a bachelor's in Metallurgical Engineering on top of his Chemistry degree from Worcester Tech.

CADIGAN: I didn't know about his Chemistry background. I know, of course, that he ended up with two or three metallurgical courses that you had.

MARSTON: He had, the Navy had sent him to Carnegie Tech to get the metallurgy work, but Carl was hired by Machmer and then after he got here, he decided he wanted to teach and we were glad to have him. And he took over the old "rat" lab there, that at one time had been a nursery school, and with Carl's ability and flair and artistic inclination and so forth, he made that one of the, really, very attractive laboratories...

CADIGAN: I remember that. Of course I was in close contact with him when he was in the Dean's office. The first place, he had difficulty in finding a place to work then. They didn't have an office for him, was pushed around a great deal, and then he soon became disillusioned about being some sort of a super Boy Scout leader handling the kind of problems, the student problems that a Dean has to handle, and in those days, our approach to them was pretty much at a Scoutmaster level which had, I guess had something to recommend it then, when I see what goes on now. But nevertheless, Carl soon became disillusioned about that. First thing I noticed, he was over in your building, but I don't think he went over there until you got the main Engineering Building done. Didn't he come over about that...no, he went over into that old shingled, small shingled cottage there by the Nutrition Laboratories.

MARSTON: There were onions stored in one end and Carl's lab was in the other.

Cadigan: Yeah, I remember that. Well, anyway, the point I was trying to make is that it

certainly reflects very well on all who had something to do with it and I'm sure that you'd agree that there were a number of people who did.

MARSTON: Oh, yes.

CADIGAN: To achieve accreditation in a time, at a time when accreditation in Engineering was particularly hard to come by because of the intense interest in it and the demand on the part of the profession to maintain high standards, to do this in a period of years, I would guess that not many other institutions did that.

MARSTON: It was a unique opportunity, Don, for us in Engineering. I don't know of any other situation where we had the pressure for it, the support from the administration on campus, and we must have had a lot of support in the Legislature too. I recall talking with Leon [A.] Bradley who was head of Bacteriology on campus and Leon was looking for a building and at the same year, we were looking for, I think, for the money to complete the main Engineering Building. And I remember Leon saying to me after the Legislature had adjourned—he got his money and we got ours—I remember his saying to me, he said, "Damn you, George," he said, "You certainly have a lot of friends down there in the Legislature. We damn near lost our building and yours went through without much opposition."

CADIGAN: Now what building were you referring to that he had? not referring to that Naval surplus building that was attached to the end of Marshall Hall. It's still there.

MARSTON: No, I think it was the first unit of the Public Health.

CADIGAN: Public health, yeah.

MARSTON: And my reply to him, I remember distinctly was, "Well, Leon, if we've got friends in the Legislature it's because of the job we've done. It's not because of the politicking because", I said, "I'm not a politician." So it was an opportune time to develop engineering and many, many people had a part in it. As I say, we were fortunate in getting good faculty...

CADIGAN: Most of whom stayed.

MARSTON: Yes, that's true.

CADIGAN: They didn't go off somewhere else.

MARSTON: I think it's significant the number of engineering faculty that had won the outstanding teacher award in later years here on campus, I always felt, Don, and I felt strongly about this, that as we developed, it was important that we attract a couple of "headliners", etc.

END TAPE 1, SIDE 2

BEGIN TAPE 2, SIDE 1

This is Tape 2, Side 1 of the interview with George A. Marston, former Dean of Engineering at the University of Massachusetts. This interview is being taped on January 31, 1977 in the Whitmore Administration Building of the Amherst campus of the University.

CADIGAN: When we stopped talking last time, we had just gone over the, I think we closed by going briefly over the sequence of events in the School of Engineering going through the immediate post-war years up to the time when, starting from a collection, a miscellaneous collection of courses in one or two, if not more, different departments, up to the time that it all was brought together and you and your colleagues brought it together into a School of Engineering that got itself all, if not most, of the, most, at least if not all, of its curricula accredited by the Engineering Council for Professional Development.

Along in here, I'm going back over the notes in the Trustees minutes and, some of the other sources—I found that the Trustees approved the establishment of an Engineering Research Institute and I vaguely remember it, but what is it?

MARSTON: Well, most of the land-grant colleges, Don, where Engineering was a major part of the program, as it was at most of those colleges and Universities, there was an agricultural experiment station and an engineering experiment station, and of course, we never had an engineering experiment station here, and we recognized the importance of some vehicle really whereby research could be carried on within Engineering officially. And I don't recall who proposed the name of the Engineering Research Institute, but there was at that time, I think, some activity down at Lowell Tech, Textile Institute, as it was known. They had what amounted to a Research Institute there and it might have been following the pattern that they had set, that the title was developed. But in effect, what it did was create what was common at the other land-grant colleges, an

engineering experiment station for research.

CADIGAN: I didn't know what it was. I was curious about it. I remember Reference to it but also, was this the vehicle whereby your people could go out and help business and industry up and down the Connecticut Valley or in western Massachusetts? Because I knew there was quite a bit of activity like that at one time. There was a question of released time for faculty to go out and participate, was discussed as a part of it. Was this the same thing?

MARSTON: That was much like that, and also, I think that one of the earliest projects that we carried out under Engineering Research Institute was John [B.] Longstaff's study of the fogging and icing of submarine periscopes in Arctic operation and that was done with the cooperation of Kollmorgen Corporation over in Northampton, and...

CADIGAN: They were mainly an optical firm, weren't they?

MARSTON: They were an optical firm primarily working for the Navy and Longstaff with his long experience in submarines for the Navy and of course, he came out of Devens—he was a faculty member down there before coming with us.

CADIGAN: You mean the University of Massachusetts at Fort Devens, the Army installation.

MARSTON: Right. And so, that was one of the earliest projects.

CADIGAN: You had, I knew that Longstaff was a retired Navy captain, I believe.

MARSTON: Right.

CADIGAN: Rank of captain, but you picked up also during those periods and referring back to last week when we talked about recruiting, you picked up a lot of men who had military service in one branch or arm of the Service or another,

MARSTON: Oh, yes. That is true. Last...

CADIGAN: I guess everybody who was alive and healthy and sane came out of the Service in those times. Perhaps that isn't so important. Excuse me.

MARSTON: No, I think that's correct, Don. And most of us that were a little older and didn't have to go in, did go in, I think. But speaking about recruiting faculty and in a sense the rapid development of the School of Engineering here, I want to mention that, and I think I've mentioned it before, that I considered it very 7 important that we maintain the respect of our sister institutions in Engineering Education. And we were extremely fortunate in attracting two faculty members to our group in the late forties. One of those was Dr. Carl [S.] Roys, who had been at Purdue for many years, then went to Illinois Tech and then to Syracuse, and he came with us because he wanted to get back to his ancestral home, I guess. He was from Buckland originally and was a graduate of Worcester Tech. And a rather interesting incident occurred which will illustrate the importance of Dr. Roys to us, and I'll follow that by mentioning Merit [P.] White.

But I happened to be at a land-grant college meeting in Washington and happened to sit next to George Hawkins, who was Dean of Engineering at Purdue, and this was an Engineering Division meeting of the land grant college Association. And Hawkins turned to me and said, "You're from the University of Massachusetts, aren't you?", and I said, "Yes." "Well," he says, "That's where Carl Roys is, isn't it?" and I said, "Yes, we're very pleased to have Dr. Roys with us." And to quote George, I think almost directly, he said, well, I don't know whether you know it or not, but Dr. Roys is one of the really great electrical engineers of this country." And he said, "The only reason that he left Purdue was because he was so far ahead of our department there that he just couldn't stand it any longer and went to Illinois Tech."

CADIGAN: I never knew that, I never, I knew him, of course, very well. As a matter of fact, he had a daughter who went to U.M., didn't he? A daughter or a son, I think it was a daughter.

MARSTON: It may be. I don't...

Cadigan: 'Course I knew him in the admissions process, I can remember.

MARSTON: Right, but he was a, he could have got his doctorate he told me in either Mathematics or Electrical Engineering, and of course, in those, that was a period in which the, theoretical if you want, a mathematical approach to electrical engineering, was developing very rapidly.

And then there was Merit White, who was the second of our two headliners, you might say. Merit White was the first PhD in Civil Engineering out of Cal Tech and his particular field was the Impact Loading of Structures; during the war years, World War II.

CADIGAN: Yeah. Two or three wars ago as far as you and I are concerned, I guess.

MARSTON: He was with one of the research organizations in Europe evaluating bomb damage and so forth. And his particular academic interest was earthquake loading of structures. But everybody seemed to know Merit White and often I had people say, "Well, you're at the University of Massachusetts. Is that where Merit is?" And it helped a great deal, really, to be able to say, "Yes, that's where Merit White is with us." And think it did a great deal to establish a rapport let's say, with the other institutions and particularly those in engineers' and academic circles.

CADIGAN: Yeah. We had that same thing happen at a number of other departments. The man here in English, was brought here from Yale, the name escapes me for a moment, as a Commonwealth Professor, almost for that very reason, and in his field, his eminence is so well known that...

MARSTON: [Thomas W.] Copeland?

CADIGAN: Copeland, yeah. That's the man—feather in our cap. And in a number of other cases. Did you have any Commonwealth Professors so-called when we actually started that program?

MARSTON: Yes. Doc White was a Commonwealth Professor, and of course, Carl, Carl Keyser became one.

CADIGAN: I didn't know Carl was a Commonwealth Professor. We'll explain that. We haven't had anybody that I've talked with yet, explained what the Commonwealth Professor program was. Although Lederle, in talking with John, Bob McCartney discusses it a little bit. But it was a program whereby we got approval of the Legislature to go over what were then the salary, upper scale salary limitations to, for a few individuals, to attract outstanding scholars in the particular fields and to bring some distinction, or let us say, increased, additional

distinction to our faculty.

Your mention of Roys and White brings something up to me. In these days, when you were going through the development of the School of Engineering, attracting people of that sort, I was acting in dual capacity of our dual office of Admissions and the Registrar's office, and so we had contact with the students as they came in and we had constant contact with large numbers of the faculty and the Registrar function in terms of kids getting into jams on their schedules, or kids getting into a mess on their counseling they received or getting into courses they had no business to be in, or not getting into required course sequences, and we had constant contact. And in mentioning Merit White and Carl Roys, and this was, so far as I can remember, characteristic of all contacts that I had with the School of Engineering, we never had anything but the utmost courtesy and cooperation. Now, we got told off many times by many faculty people, usually new ones who hadn't been around too long who thought we were interfering in something we had no business to interfere with, and I don't know, perhaps in some cases we were. But Merit White, particularly was a soft-spoken, courteous gentleman and of course, I guess maybe that goes along with his eminence as an instructor and researcher and scientist, engineer, his field. Never can I remember anything but the utmost cooperation and you know the kind of argument we used to give. You and I have argued on occasion, but never was there anything personal about it and this was pretty much characteristic of all the people that you had over there. You and I came closer to words than, you know, than was, because we knew each other so well, than with some of the other people. And I think it is very fine that the men of this eminence can on occasion get down to an insignificant little detail and stay with it and work it out somehow.

MARSTON: Well, of course, Merit White came with us primarily because his home was over in Whately.

CADIGAN: Yeah.

MARSTON: And Roys and Merit White, two Connecticut Valley people, really, coming back where they originated. Merit White was a graduate of Dartmouth at their school there. In fact he was a classmate of Nelson Rockefeller.

CADIGAN: What happened -co some of the, some of your faculty people that went on, left

you and went on. We must have had some go to other engineering schools, leave us and go on, or go out in-co...

MARSTON: Industry,

CADIGAN: Industry and so forth.

MARSTON: We lost more to industry. I used to say that whenever a faculty member, more than three children appeared in a family, why I knew they were on their way. We lost Dick [Richard] Atherton and Norm [Norman E.] Wilson to Westinghouse. We lost Chester Wolowicz. He went down to-Florida, his son had asthma and he thought that might improve it, but eventually he went to NASA and through the years, we didn't have much turnover, by and large—I think because they liked Amherst, we kept them busy, there's no doubt about that. And often we were teaching fifteen and even eighteen semester hours there and they don't have much time to worry about their situation when they are doing that.

CADIGAN: Well, while we're talking about faculty, of course, times have changed a great deal. You know what's going on at the present in terms of faculty trying to organize to protect their own situations regarding their own contract, their own job descriptions, their own salaries and various other things. I don't recall that we ever had any of that kind of interest or activity on campus. I don't remember. Of course, it's a nationwide phenomenon at the present time.

MARSTON: Yes,

CADIGAN: But we didn't have any labor problems with our professionals, did we?

MARSTON: No, no. If they were unhappy, they could go get a much larger salary in industry and most of them had made the decision when they came here that teaching was what they wanted. The trouble today, it seems to me, is that, first of all, the University salaries are comparable or even better than some industries are, and secondly, you've got a little different type of faculty member. With the emphasis on research, which is so prevalent, the teacher as such, isn't the faculty member that you have today. Look upon the outstanding faculty member today. I gather he is the one that gets all the grants, attracts the money and so forth and I...

CADIGAN: Like Dwight [W.] Allen in the School of Engin...of Education.

MARSTON: Yes, yes. Certainly he would be a good example. And in that connection, I recall being at Princeton University for two weeks at a Naval Research Seminar, and one of the speakers was the Director of the Applied Physics Laboratory at Johns Hopkins University. Of course, they've been very active in research and development work for the Department of Defense and other government agencies, and he gave a talk about what his activity consisted of largely, and obviously he was a high level administrator, as well as being an outstanding scientist in his own right. And somebody raised the question after his talk — "Which is more important, the teacher or the researcher?" — Without a moment's hesitation, he said, "Why, obviously, the teacher." He said the researcher does his work, writes his paper, writes up the results and it goes on the shelf, published, and goes on the shelf. But, he said, "That gathers dust until the teacher comes along and works that into the instruction program." He said, "There's no doubt about it, the teacher is more important."

CADIGAN: Well, of course, you remind me of [Ray E.] Torrey and his attitude toward teaching versus research, and he, I can remember him saying, that he would love to do research, but that in those days, and with our budgets as a little state college, we didn't have the budget to provide the equipment and the assistance necessary to do creditable research.

MARSTON: Right.

CADIGAN: And that what the people of the state expected from this little institution was teaching, that their youngsters be taught, and that what he could do would be to devour and digest all of the research in his field and pour it out to the students. So he had the same attitude.

I want to come back later, after we hit a couple of other points, perhaps as a closing point, to this business of teaching versus research because you made a comment to me once that I've never forgotten, and I'm going to describe it to you and tell you about it and, when we come back to it.

There are one or two other things that happened in the School of Engineering, however, and perhaps a few people in Engineering and other departments we might like to reminisce about before that—and one of the other things was the program, the General Electric program, the program in which we cooperated with the General Electric Company in Pittsfield, Massachusetts, and I don't know,

where did the, where did the initial impetus come from? Did it come from General Electric and what happened and how did that develop? Do you...

MARSTON: Well, I think it came from General Electric originally. We always had, during my time here, very excellent relations with the General Electric Company, from the time of Maynard Boring, who was their recruiter of technical personnel and headed up that program for I guess thirty years, for which he was known all over the country in the Engineering Schools. But through the years, Don, up to the time I left and it probably continues, General Electric was taking about ten percent of our Engineering graduates and if you know the company and their recruiting policies, you realize what a compliment that was to our School.

CADIGAN: This would be, not necessarily the transformer division of Pittsfield, or whatever they had in Holyoke, it would be national?

MARSTON: No, it would be national. Chemical engineers, and in fact, one of the vice presidents of General Electric in the Chemical Division is a graduate in Chemical Engineering from here. And, but, I think Pittsfield felt that as they were more isolated than some of the other General Electric centers, they had no college in the area, they contacted us as to the possibility of offering some of their non-degree people undergraduate courses in Engineering. And of course, it was on that basis that Bob [Robert J.] Doolan was appointed by G.E. in Pittsfield to be the contact man at Pittsfield with the University of Massachusetts. And so it came originally from General Electric, although certainly we welcomed it. And that program continued for several years, as you know. We used to go up and...

CADIGAN: How well we know, huh? I know you're thinking about those nights over. They elected that particular time to redo Route 9, isn't it?

MARSTON: Yes.

CADIGAN: We had to detour on many a winter night and neither one of us had a car with a good heater in it...I can remember some of the weird nights. But the idea, of course, was to give college level courses in, to General Electric employees. I'm not sure, however, we also had cooperation from the Pittsfield School Department?

MARSTON: Yes.

- CADIGAN: There was a superintendent of schools there who was very, very cooperative. I guess, probably because in Pittsfield, the General Electric called the shots.
- MARSTON: Right.
- CADIGAN: The big industry and I guess he had no choice. But certainly he was very helpful. And then there was Dr. [Edward B.] Van Dusen.
- MARSTON: Yes.
- CADIGAN: A guy, and who probably somewhere in the eastern part of the United States is still working nights, I imagine, because all of his life has been in, most of it certainly, has been in young adult education, opportunities and programs done in the, in a system or in relation to other groups on an evening basis.
- MARSTON: Yes. Of course, you know Don, that he went, after he left Pittsfield, he went down to Lowell Tech and just this fall I met him up by our solar energy house up there, looking at that. And his son designed the blades on the windmill up there.
- CADIGAN: Now, is his son here? Did he go, is he here on the faculty?
- MARSTON: No, he's a graduate student under [William E.] Heronemus.
- CADIGAN: I thought he was going to MIT.
- MARSTON: He was, but when he learned that Heronemus was here, he came up here, transferred up here, and sometime will get his doctorate. But he's also running a plastic canoe business and other things on the side.
- CADIGAN: Yeah, because I talked with Ed and his son one time when they were up here. That was after I was out of the Admissions Office. He came over and his son was very interested in crew, rowing on the water.
- MARSTON: Yeah, I guess he makes shells too,
- CADIGAN: Yeah, I can see how he got into that. But at the time, the son. Was pretty much determined that he was going to MIT and I couldn't understand why Ed had him

up here to show him around when the son was so positive about going to MIT unless Ed was hoping that maybe he'd come up here instead. Well, certainly Dr. Van Dusen worked for the, and I think his name deserves a place in any history of the University.

MARSTON: Yes.

CADIGAN: He worked for the Springfield school, the Pittsfield school department at the time and he was the man who was there and saw that the rooms were scheduled as necessary and he was the man who helped get a lot of the instructors from the various sources I believe around the area.

MARSTON: Right.

CADIGAN: We had another feature to that program that I don't recall we had ever done before. But we had students enrolled in courses in which we could give the classroom instruction almost anywhere. We couldn't give the laboratory work, except in specialized laboratories. They came down, was it every other weekend or...?

MARSTON: Yes. They came down I think every other weekend, Saturday mornings and the, some of the courses, the physics courses, for example, were given, and the electrical engineering courses. But of course, that was pretty much with the understanding that they would transfer at the end of their sophomore program down here for the last two years.

CADIGAN: Those were degree candidates?

MARSTON: Those were degree candidates.

CADIGAN: Did we have degree candidates and non-degree candidates, were we instructing both up there?

MARSTON: Well, no. I think they were all in the same group, but some did and some didn't come to the campus here. But we never felt that we could give all of the program at Pittsfield. So that they did have to transfer.

CADIGAN: Well, there were specialized laboratories requiring equipment that they didn't

have there, so they came down.

MARSTON: Yes, right.

CADIGAN: The General Electric Company subsidized this program...

MARSTON: Oh, yes.

CADIGAN: Almost one hundred percent, except for you and me, I guess, didn't it?

MARSTON: Yes, they did. They paid the salaries and it was the going rate of salaries for the faculty and they paid the travelling expenses.

CADIGAN: And then somewhere along the line, they also introduced courses in business administration.

MARSTON: Yes.

CADIGAN: But that folded up before engineering did, as I recall it.

MARSTON: It may have. Let's see, that folded after I left, I think, and of course, Bob Doolan transferred down here to the Admissions office.

CADIGAN: Came down to be Secretary, didn't he or acting Secretary of the University, first? When Burke left, I think he did, and then he didn't like that and he went off into Admissions when I was down in Boston with the Community Colleges. I don't think the sequence really matters, but you know he was acting Secretary of the University for a period there.

MARSTON: I didn't realize that.

CADIGAN: He didn't care for it.

MARSTON: But I think, yeah, I think he came down here because we knew him and as the program phased out up there, he had his chance to come to the campus, which he took.

CADIGAN: Well now, we haven't said anything about the students in Engineering. We did

mention briefly your Engineering scholarship program, but we haven't said anything about your attempts—I'm recalling in my own memory—your attempts to get an organized Engineering alumni in, going. We had something called the Engineering Journal that I guess was a student publication and there were other student organizations, student, class officers, I don't know what you had. What I think, that is, what I'm getting at here is that in my memory, I don't remember any other Department or School who had, who took positive steps in these directions to organize student organizations that were unique to their own School or Department.

MARSTON: Well, I think that, perhaps this came about, Don, because as the curricula became accredited, then we were eligible to establish student branches of the Professional Engineering Societies on the Campus.

CADIGAN: These had Greek letters like fraternities, didn't some of them?

MARSTON: No. No, you're thinking of Tau Beta Phi, I guess. That is an Engineering honor society. But for instance, the student chapter of the American Society of Civil Engineers and the student chapter of the American Society of Mechanical Engineers, and these are active at most engineering schools, and it provides leadership training for the engineering student. They generally have one meeting a month, at least, and there is a faculty advisor. One of the most effective faculty advisors we've had on the campus here is Bill [William W.] Boyer in Civil Engineering with the Civil group. But these were the students' organizations, you might say professional organizations, bringing in speakers from outside, practicing engineers, and to tie this together, we set up the Engineers' Joint Council, I think we called it, where the president of each of the student chapters and the president of Tau Beta Phi, which is the national engineering honor society met as the sort of coordinating body, and this, I think, does a lot to build up esprit de corps amongst the students in engineering.

One amusing incident, of course Don, as you realize, in the late forties and early fifties, most of our students were veterans. In fact, we graduated 231 students in Engineering in 1950 and I'm not sure that they ever exceeded that number of BS Degrees in Engineering up to the present time. But one day, one of our students, coming back from Northampton, was picked up by the State Police and the next morning it came out in the paper that this particular individual had been arrested for drunken driving. Well, of course, this was a serious offense, and we

took an interest in our students' activities, extra curricula, or whatever you wish to can them...

CADIGAN: You'd be pretty busy nowadays doing that, I think.

MARSTON: I expect we might. But I remember there was considerable discussion amongst the faculty as to just what we should say to this individual. And then I learned that his classmates had got him on the mat and this newspaper article mentioned that so and so of the School of Engineering had been picked up for drunken driving and the students made it very plain to him that the next time he got picked up he should say he was from the School of Home Economics of the University of Massachusetts. So what more could I say? Now to bring that story up to date, this past Homecoming Day, I went to a champagne breakfast that the Engineering group have that Saturday morning of Homecoming football game and had breakfast with them and this man came up to me and he said, "My name is so and so" and I said, "That name is familiar. Didn't you get into difficulty between Northampton and Amherst and didn't your classmates tell you in no uncertain terms that you should say the next time you got into trouble that you were from the School of Home Economics?" By that time, he was enjoying it immensely and he said, "You're right." He said, "Would you mind telling that story to this young man over here," and he called his son over and introduced him to me, that was Pat [Patrick F.] Tobin.

CADIGAN: I've found the same experience. The students that come back to see me or from whom I get Christmas cards, oftentimes without an address so that I can return one, are the ones that I had a show- down with in the Registrar's office, like the student who came in and wanted something and was arguing for it and finally when I said, "No", and finally he looked at me and said, "Well, it doesn't hurt to try." He didn't expect to get it; you know, in the first place. But those are the, those are the ones. You mentioned the word Student Council, Engineers' Joint Council. That brings to mind the Deans Council that you and several others started during the Van Meter administration. Van Meter came in as president sometime in '47, but he was acting President for a period of time.

You became Dean of Engineering in, I guess it was the Trustee meeting of June, sometime in 1948 and not too long after that, you, well, I can say fairly to save you from saying it, that the Schools and Colleges all over the campus at the University and the Departments were each operating pretty independently and

there wasn't much coordination. There wasn't much getting together, except if they got together socially. We certainly had no structure to bring people together of different, vastly different disciplines on the campus, different curricula, different departments and so forth. And somewhere along the line, someone got the brilliant idea that the Deans of all the various Schools and Colleges ought to sit down and have lunch and talk once in a while. Is that the way the Deans Council got started and did you do it?

MARSTON: Yes. We met every other week, and I guess that at that time, I was probably the senior Dean, which was the only justification for my presiding as such, There wasn't much...

CADIGAN: You hadn't been in too long. You must have had a lot of young Deans then, we had, well go ahead, I'll mention some names later.

MARSTON: But in any event, I used to get out the notice and remind the people when we would meet. We would meet for lunch and then generally discuss topics which seemed of general interest to all areas and we'd break up around 2 o'clock in the afternoon. And I think it did a great deal to, oh, you might say, unify the campus. We would talk about Admissions policy, or we'd talk about grading pattern and very seldom did we reach any momentous decision. In fact, we never took a vote. We always, the consensus was, and, but it did create a reasonably good rapport I think in the various areas and the provost used to meet with us, occasionally the president, but I think the president was smart enough to realize that it was probably good for the deans to get together without the president.

CADIGAN: I know Van Meter felt that way.

MARSTON: Yes.

CADIGAN: Because I've heard him say so. Did you have any established or regular input to the president's administration, that is, you came up with ideas or suggestions or just thoughts?

MARSTON: Just thoughts.

CADIGAN: Did you regularly pass something along to the president for his digestion?

MARSTON: I expect that we did, probably there were minutes prepared, pretty sketchy ones

sometimes, but those did go the provost and the president. Another thing I was always very, perhaps proud of, Don, somewhere along the way we got the idea that our Engineering students, as we've mentioned, were taking twenty percent or more of their work in humanities and social sciences and there was the mathematics and the physics and the chemistry and so forth, and we decided that it might be a good idea to occasionally to meet with those other departments and we had coffee hours at the Faculty Club where the faculty members from, say, Economics that were teaching EC 25 and 26 would explain in a brief statement, fifteen or twenty minutes, what they were offering our students. This was attended by most of the Engineering faculty and sitting there in the Faculty Club lounge and exchanging ideas I think, did a great deal to well, bring the faculties from these other departments, getting them acquainted with the Engineering faculty who were mostly new at the time, and for them to recognize that we were interested in what our students were getting from the other areas. And I remember that I used to buy the coffee, of course it didn't cost quite as much as it does these days, but that was my contribution to the meetings.

CADIGAN: I can remember when you had those. We didn't, I guess that was one of the, well, there had been other such groups getting together, mainly in Arts and Sciences, more closely related fields...When I think of the, I don't know if you have any comments to make, when I think of the, your Deans Council, I think of people like Sieling, Dale [H.] Sieling was Dean of Agriculture. I think of people like Mary Maher who was building a brand new School of Nursing and fighting a long, lonely battle over there; and I think of Fred [V.] Cahill [Jr.], as people that I suspect were active participants in your-Deans Council discussions. Now, Helen [S.] Mitchell I know attended, but I expect that Helen was not a star performer on the, in the elocution, but wouldn't Sieling and Mary Mahere and people of that sort be pretty outspoken and pretty, I mean contributing too, to the, and defensive of their own, of their own little bailiwick?

MARSTON: That's right. I think you've named the, Dale Sieling had very definite ideas. He and I didn't see eye to eye on some of them. I think we had mutual respect. Mary Maher, as you say, was working very hard to develop a School of Nursing, and perhaps in a sense, we could help her too. Of course, you realize that the School of Nursing, and spent some years in the Engineering building at our invitation and I think all...

- CADIGAN: Everybody said that you were just trying to get another cohort on the Deans Council on your side, that's a...
- MARSTON: Well, that might have been true, but Mary, Mary never minced any words. If she had some opinion, she certainly expressed it and the Dean of the Graduate School attended and I think that was a lot of fun and it served its purpose. Warren McGuirk, of course, was there and [Arless A.] Spielman, later, but it, I think speaking of Dale Sieling ...
- CADIGAN: It wasn't too long after this that he and Mr. Mather disagreed.
- MARSTON: Yes.
- CADIGAN: Was it Mather, yeah, Mather disagreed and he left to go down to the Northeast, is it the Northeast Environmental, U.S. Army Northeast Environmental Research Center or something like that?
- MARSTON: At Natick, yes.
- CADIGAN: Natick, where he still is, I guess.
- MARSTON: I think so. Unless he has retired.
- CADIGAN: Yeah, he was a few years ago, I know.
- MARSTON: That's right. He had the top job down there, Chief Scientist.
- CADIGAN: Mather claimed at the time, you know, that the disagreement was that Dale wanted more money than the President was getting—was the real reason and he couldn't get it, so he went off to this other job.
- HARSTON: Well...
- CADIGAN: But there was also that other episode of the horse, the horseman there, that I guess got blood between them started.
- MARSTON: Yeah. Dale had very definite ideas. You remember that perhaps Dale was ahead

of his time because his feeling was that every faculty member should teach, do research and carry on Extension. Well, perhaps that isn't too far from our philosophy that pervades today. My philosophy was that I hoped to make a well-rounded Engineering School out of lop-sided people.

CADIGAN: Yeah. You had, I think that's a quotable quote incidentally. I hadn't heard it said before.

MARSTON: Some people are good at teaching, others are more...

END OF TAPE 2, SIDE 1

BEGIN TAPE 2, SIDE 2

CADIGAN: I first met Dale Sieling when he was in Agronomy, I believe.

MARSTON: Yes...

CADIGAN: Started. And I first met him in my capacity as Assistant Registrar and he, again, was one of those persons that when he worked with us he had very positive positions and it was difficult to talk him out of something. If, for example, he was taking the position we should do something one way and the entire rest of the campus wanted to do it uniformly in another way, and, but on the other hand, I found him eminently fair. I certainly tried to avoid crossing him up though because I—he had this very positive position.

Mary Maher was Dean of, we mentioned starting the School of Nursing, presented in my hearing once, and this was after Machmer passed away—I was, for a period of time, the acting Chairman of what was called the Course of Study Committee for a very brief period of time. I was quite embarrassed about it because I was so junior to it, to most everyone there, but the—during that period when I was the Chairman and Mather came to a meeting, it was in the auditorium of the Old Chapel, I remember Mary presented for the first time her curriculum in Nursing and it was the finest presentation that I ever had heard before, or since, of an entire program, in detail, with the reasons for each step and each part and parcel of the program including the internships in the various hospitals and so forth, that I can ever remember. And I can remember Mather was there, too and he was very much impressed.

I guess this brings us to Jean Mather's administration. Bob McCartney interviewed Jean, and Jean doesn't go over his administration in great detail. He takes individual, selected projects and events and crises and so forth, and his orientation in that interview with Bob was mainly, as mainly toward his public relations efforts around the state and his contacts with people in the State House in Boston, the Executive Department and the Legislative Department, and so forth. So he didn't, he didn't in his interview, didn't get very much into on-campus activities. He does mention the horsemanship episode and explains why he made the decision that he did the following day and the fact that it lost him some friends, and so forth, but very briefly. So I can't get much from the notes about anything. I gather that having gotten operating during the period of the fifties, having gotten accredited and operating as a School of Engineering, it was just a question of getting down to work and teaching the kids. Did much happen during the decade of the fifties? In the Mather time?

MARSTON: No, I don't think so. We, Mather left us alone pretty much during his regime. There wasn't strong friendships developed during that period between Mather and myself and so forth. But no, he I think Mather is, one of the strong points was that if you're doing the job, he left you alone.

CADIGAN: Well, I think he also had a fantastic belief that his job was to do the sort of thing he did, stir things up and get interest focused here and-he spent an awful lot of time doing that. He didn't have time for much on-campus stuff.

MARSTON: No, that's right, no. Well, during the fifties, of course, we were building up our physical plant, It might be of historical interest that during the, after the Gunness laboratory was completed, which was in the late 40's I believe...

CADIGAN: '48, I believe, along with the Engineering annex, simultaneously, pretty much same time.

MARSTON: The Engineering annex down by the Engineering shop building, that as, replaced the building that burned down there, one-story brick building. Then, of course. County Circle, as you remember, Don, was one of the housing projects in back of Draper and they had a fire in one of those units, not a big one, and I recall so distinctly moving one of the wings of that wooden building over west of Gunness. We were gathering war surplus. We needed some place go get it under

cover and my recollection is that we had about \$250, and Sullivan, the contractor from Northampton, was on the campus at some building and some way we prevailed upon him to move that building. We couldn't move it ourselves, over west of Gunness, and I can still remember the day that we moved it. It was well, it was melting some, it was spitting some, snow and mist and so forth. And we had our whole staff and technicians out there. We put in the concrete foundation and the floor after we got the building located on the site, and I was out there with a raincoat with all the others shoveling gravel and getting up underneath the building after it had been moved and I got word that Mr. Lanphear wanted to see me. Well, this was pretty late in the afternoon and it was a little embarrassing to go over there and leave the others working, but I did. And I remember walking into your office over there, Don, and Mr. Lanphear took one look at me and I guess I was covered with mud from head to foot and he said, "George, only a Dean of Engineering could get away with looking the way you do." And then he introduced me to the parents of a prospective student and we talked. But I often think of that, that's the building that we now call Gurski Hall. The reason for the name was that there were two Gurskis working on the project and there was only one Marston or one Dittfach or one Wilson or one Frank [Francis G. Duda].

CADIGAN: That building now would, stick out over that highway in back of that street in back of Gunness, wouldn't it? Extended beyond the north end of Gunness, didn't it?

MARSTON: The north end there...

CADIGAN: It would rest out over into the road, wouldn't it now?

MARSTON: No, it's still-there.

CADIGAN: Well, I was going to ask you that. I, you know, I knew that I had seen it fairly recently, but I don't know how recent.

MARSTON: And I recall also, Don, that it got to be very dilapidated looking because the paint began to peel as it did on those old wooden buildings.

CADIGAN: Well, it was a war surplus Navy or Army barracks similar to the one that burned down only this was the one floor.

MARSTON: Right.

CADIGAN: And those were T-shaped buildings I remember.

MARSTON: T-shaped buildings, and I prevailed on George Brehm to give use some paint. Money was pretty scarce in those days as you remember, and we weren't about to spend our own money for things that we could scrounge from others.

Cadigan: No. As a matter of fact it is rather remarkable the things that this little institution did with the limited amount of money it had over the, over the years.

MARSTON: So I went to George Brehm and he gave me paint but there wasn't enough paint to paint the four sides, so we painted the two sides facing us and let the others go.

CADIGAN: I can remember that. I can remember those buildings, of course those buildings were brought in to take care of the sudden influx of housing the students. One of my other duties at that time was—I was Director of Housing and I think we opened, in those days the college opened in the middle, around the middle of September, the twenty-third of September or something of the sort, and we were hard put for places to put our students when they came in and we needed those buildings.

MARSTON: Oh, yes.

CADIGAN: And when registration and first day of classes came and we were to put people in there that were arriving, the buildings were already, except the furnaces had not,

MARSTON: Were not operative.

CADIGAN: And had not been put in and we had no heat in the building. And for the first time within living memory, we had a snowstorm on that day or part of September, I guess maybe in the last one. But all of the students—now one of the buildings had heat and the others didn't and of course, the one that had heat is one that we had. The students had not yet arrived because the freshmen used to register first and the other students arrived later. And the students that were

in the unheated buildings, the upperclassmen who, no, the freshmen, promptly got up and moved over to the empty heated building and I lost all control of housing assignments in those buildings for the rest of the year, and this resurrection, insurrection, was led by Tom [Thomas W.] Fox.

MARSTON: Is that right?

CADIGAN: Who still reminds me of it because he said he never say anybody so mad in his life as I was when I found out that I never would possibly get control 'cause they weren't going to move again after they moved. I didn't know whether I would send somebody over there and say, "Go ever there and find an empty room and move in," That's the way we handled it.

MARSTON: Do you remember when one of the students walked in the office over there, Don, and told you or somebody that he had a room to rent and, come to find out, this was in a trailer that was north of North College and apparently it was a small trailer and I don't believe it could fit more than one room, but he was willing to take a roommate in.

CADIGAN: It, was that [Edward P.] April, wasn't it?

MARSTON: I don't know.

CADIGAN: Do you remember Edward April? You remember the name, I'm sure.

MARSTON: Oh, yes. I remember him. It might have been...

CADIGAN: I think it was Ed April. 'Course he had no business parking the trailer there, you know.

MARSTON: North College?

CADIGAN: Yeah.

MARSTON: I don't recall that.

CADIGAN: You know there used to be an open field between North College and the ravine. He just drove up with his trailer he had bought somewhere on the way up from

Plymouth or Carver or somewhere he came from, and drove up and parked it there. He, later, of course, well, the last I knew he was working down in Groton with General Dynamics.

MARSTON: Yes.

CADIGAN: On their submarine program and he was a roommate of Edward [C.] Bourque. Ed Bourque married April's sister, incidentally, as a result of that liaison and they were, both of them have worked both in Groton and over in Holyrood, is it, Scotland, where they have the other submarine base?

Well, of course, you resigned fairly soon after Lederle came in. That is, he came in 1960 and you resigned in '63. I don't know whether the Lederle administration had any landmarks in Engineering for you or whether you were still in the process of getting your School to operate and...

MARSTON: No, our relations, my relations with Lederle were good I think, and when he came in, I remember his coming and, but there wasn't much happening. One thing that you mentioned and I haven't commented on was the Engineering Alumni Scholarship Fund. That was started by Al [Alfred] Courtines, class of 1960 [actually 1950], I think...

CADIGAN: Big, blonde fellow.

MARSTON: Yup, and he thought it would be a good idea, he was a veteran, to try and collect money from the graduates and through the years, up until the time I left, we used to get out an Engineering Alumni Newsletter around Christmastime with news of the alumni and this went to all engineering graduates. It got to be a real, real burden. Joe [Joseph S.] Marcus and I used to work many long hours on getting that thing out and the secretaries did, too. But this Engineering Alumni Scholarship Fund is still going. This year, they gave, I think I'm correct, that they gave out eight \$500 scholarships. So that's been going since 1950—and it was always amazing to me the amount of money that we collected. It was generally in ten or twenty dollar amounts, but I always felt that it wasn't the amount of money, it was the fact that these individuals thought enough of their education, the school they graduated from, to make a token contribution.

CADIGAN: Well, at one time, the graduate engineer coming out of the veterans' program in

Engineering, at one period of time, could command on the average, a higher salary than any other student in any other kind of background—and how does that, what has been the fluctuation in that situation over the years?

MARSTON: That's been true. I think the salaries of the Engineer have always been higher. There have been periods when it has been difficult to get a job, but if you could get one in Engineering, it was always at the higher rate, and I used to comment to the students, but this was not necessarily in terms of what they knew, but it was the fact that these recruiters knew that they had gone through a demanding program and had learned how to work and that was the basic reason for the Engineering starting salaries were higher than those of the other fields.

CADIGAN: Your youngsters took more hours of credit, semester hours of credit than the others did, over and above the required minimum.

MARSTON: Right.

CADIGAN: I guess other curricula are doing that now.

MARSTON: Well, in some cases, those days, 120 credit hours got you a BS degree from the University in humanities, social sciences and other areas.

CADIGAN: Oftentimes students needing, taking courses that they wanted to take and also meeting their departmental requirements.

MARSTON: Right.

CADIGAN: Many of them went over their 120, but not consistently and regularly the way your, your curriculum required in order to meet, satisfy your requirements, required substantially more in some instances, as I remember.

MARSTON: Yes. We went up in some cases to over, I guess 135,36 or even 40.

CADIGAN: Some of these, however, would, would some of these while on paper they were credits, were they doing laboratories?

MARSTON: Yes...

CADIGAN: Where it didn't mean that the kid wasn't sitting up to two or three o'clock at night at home doing homework. In other words, in all fairness to the youngster, it wasn't an unreasonable demand. Then.

MARSTON: No.

CADIGAN: That's what I'm getting at.

MARSTON: No, oh no. It wasn't unreasonable and the interesting thing, Don, was that not infrequently I'd get students who would come in and argue the point, "Why do we have to take 135 credit hours when these other people on campus have to take only 120?" And I would try and explain this to them, that they were preparing for a professional field and these were the professional standards. But I always, or very often, would say, "OK, we'll give you a B.S. degree for 120 credit hours, but if you want a B.S. in Mechanical Engineering, a B.S. in M.E., then you've got to do 136." And I never had any student take me up on it, which was good because I would have been in trouble.

CADIGAN: Well, you weren't sure, you wouldn't have known how to deliver that particular...

I've got about three more questions I wanted to ask you before we get through. I think the first one is, as you look back over your experience here on this campus and the University and in your exposure and participation in Engineering and the people that you've worked with, for and against, has this been, and looking at the historical aspect, has this been a good environment, good people to work with, cooperate with, good students, for the development of a program that you were obviously dedicated to, you devoted your life to it in Engineering, has the total experience as an Engineer, now retired in effect here on this campus and in this environment and at this University or College been a good, constructive, contributing thing?

MARSTON: Yes.

CADIGAN: For the people, for the state, for the nation, you, I'm being vague, but you know what I'm driving at.

MARSTON: Yes. I always said that I was very fortunate, personally, to be dealing primarily

with engineers. They're a hardworking group, they're strictly honest, and they expect a lot of people they work with. And I think this was a very rewarding experience for me on this campus here. I was a graduate of a private engineering college. This was my interest, this was my background and field, you might say, and to come to a campus where there were Agriculture, which I knew nothing about, where there's Home Economics, which I knew nothing about, where there was Arts and Sciences and many, so many fields. As I mentioned in my brief talk at the dedication of the Engineering building, I thank everybody for their contribution to my education. I found that the faculty here was a very democratic group. I came here as a young instructor, and whether I was out on the Metawampe hike or whether I was walking across campus, everybody spoke to me. It was a friendly environment and I think it was really a wonderful experience.

CADIGAN: The supporting, you had a lot of, your students took a lot of courses in other departments as we've mentioned, and I know, I've talked with you back in those times when you had some complaints or criticisms and so forth, but generally, were you, as you look back, were you satisfied with the quality of workmanship going on on campus, insofar as it affected your youngsters?

MARSTON: Yes. Of course, Engineering attracts more than its share of good students. This was helpful. But I remember one instructor in history coming to me one time and saying, "You know the best student I've got in my history class is an engineer and I looked at him and said, "Why not?"

CADIGAN: Was that Harold [W.] Cary, by the way?

MARSTON: No, no.

CADIGAN: Who told you that, I know you're pretty close to Harold?

MARSTON: I think it was [William A.] Davis.

CADIGAN: Well now, the Engineering building, well, I guess the last building that you participated in the design of was Engineering East. Were you, did you start the design of that, or the planning for that building?

MARSTON: Well, yes...

CADIGAN: That was pretty close to the end of your tenure, but it was accepted by the Trustees in the summer of '65.

MARSTON: Yes.

CADIGAN: But certainly you must have gotten started on it, you must have participated in, finding the need and so forth.

MARSTON: Right. Yes, although, I must admit, I didn't take too active a part in the design of that building. I certainly was, rode herd on the design of the main Engineering building, which as you remember, was the first million dollar building on the campus, built in two parts. The first was the Electrical wing, \$500,000, and then the finishing part was about \$720,000. I always said that the Legislature in those times just wouldn't trust the University with a million dollars and so in those buildings, I certainly took an active part. In Engineering East we had a different architect, capable architect, and so forth, but I turned that work over to other faculty members and—so that I can't say that I contributed a great deal.

CADIGAN: That building was later renamed, wasn't it?

MARSTON: This was the main Engineering building.

CADIGAN: That was renamed?

MARSTON: Yes.

CADIGAN: What do they call it now? I want to raise the question. To my knowledge, and I realize this might be a little embarrassing to you, but ...

MARSTON: Why don't we just take a recess here, Don, and I'll go out and I'll be back.

CADIGAN: Well, the question I want to ask you is: I've been trying to think as to whether or not, are you the only living person—I think you are at the moment, anyway, but aren't you the only living person a building has been named for while you're still going? I won't ask you any further questions as to how that makes you feel, but...

MARSTON: Yes.

CADIGAN: I don't remember any other person a building has been named for who...

MARSTON: No, it was a rule of the Trustees.

CADIGAN: Yeah. They had a policy on it.

MARSTON: Policy on it. I think [Robert P.] Holdsworth was an exception to that.

CADIGAN: Yeah, I didn't know whether Bob was still—he'd retired...

◆1arstm-i: Yeah, and...

CADIGAN: As a matter of fact, I think Rand was the one that suggested that policy, somewhere along the line, because for many years he was usually asked to head up a committee or to dream up names of buildings because of his, well, he had written that original history of the University,

MARSTON: Right.

CADIGAN: So the building became known as Marston Hall and I can't remember whether it was the day the building was dedicated or the day that it was named for you—there were two separate, these occurred at two separate times, but I remember having to make a choice. I had reservations to go away on vacation to Bermuda, I believe, and I had to make a choice as to whether I was going to cancel my trip to Bermuda or go to your dedication.

I have one last question to ask you, George—I was mentioning that I have one more question in general, sort of a closing question to ask you, but I didn't know whether you had any comments, things that you wanted to, thought would be of interest that you wanted to mention before. We go into the final curtain here.

MARSTON: No, I think we've mentioned Carl Keyser. I have pointed out that Merit White and Carl Roys were our two headliners on the faculty in the early days. I think Carl's contribution faded in later years and...

CADIGAN: He developed outside interests, didn't he, personal business interests and things of that sort? He wrote a book, one or two books, text...?

- MARSTON: No, he was always going to, but he never did, but Carl Keyser came along and Carl wrote three different texts during his time at the University. He never had a sabbatical, he carried a full teaching load, he developed his very fine instructional laboratory in metallurgy, and his metallurgy book was the most widely used book in that field in the country. And it's interesting that one or two men down at MIT came out with a book after Carl did and he beat them to the market and surpassed their sales.
- CADIGAN: Well, I think I may have, I must have misunderstood you. Didn't I ask that he wrote a book? And you said he always was going to, but never did?
- MARSTON: No. This was Roys.
- CADIGAN: Oh, o.k., yeah, 'cause I was sure that Carl had written a text that the students were using and I wasn't sure that, did he write more than one?
- MARSTON: Yes, he wrote, I think, three different ones. He collaborated with one or two men from the University of Illinois on a Materials book, but Carl was an excellent teacher.
- CADIGAN: I'm sure he must have been.
- MARSTON: The students thought he was. He was very demanding and so forth, but all of them had great respect for him as a teacher. But he was, without question, the most productive faculty member that we had during my time here.
- CADIGAN: Well I think I knew Carl, I knew you and Carl were the people that I knew best, personally, in the School of Engineering.
- MARSTON: Yeah.
- CADIGAN: And the reason for knowing Carl, of course, was that he started out in the Dean's office and so I, we got started that way and we always kept up that and we had a sort of con- test running to see who would lose the most hair as we grew older. And of course, Carl won out on that score. We used to kid each other a lot, a lot about that.

The other question that I said that I was going to ask you stems from a conversation that you had with me, we had together, and I'm not sure whether it was on the occasion of your announcing your retirement or somewhat a little bit after that, but it had to do with the reason as to why, after all these years, and in the prime of life as to witness today, many, still many good years got to go, that you left the University and terminated what, not only was an active involvement in your career and at a time when it certainly was at the height of your success at a time when many men don't know enough to get, to leave and get out, you said something to me and I've always remembered this. It was in that little office I had in South College—that you had made your contribution to the development of the School of Engineering and that you had the undergraduate program rolling and operating and that the next things that had to be done in Engineering were something that might be done by a different kind of a man with a different kind of an interest and a different kind of background. Do you remember telling me that?

MARSTON: Oh, yes and...

CADIGAN: And is this the explanation? Do you want to dwell on that as to why you quit at midstream at the very height of the, of your success here.

MARSTON: I felt, Don, that I had made my contribution here. My interest was in the undergraduate program and teaching and certainly the development of a graduate program, although there had been some graduate work started—but I don't think we had any doctoral program at that time, but I recognized the importance of the graduate work—but this was not really my interest and I felt that somebody else should come in and take over. I also felt, Don, and this was something that has been with me quite a long time, when I came here, John Ostrander was, I presume he was about sixty-eight because he retired two years later, and I have seen others and I always said that I would not want to be judged by my last five years. And I think so often people stay too long. I have repeated to others—there is a time to come and there's a time to go and time to go is sometimes overlooked.

People can stay too long. They lose the respect of their colleagues and so forth. Furthermore, I felt very strongly that even though I guess I was fifty-four when I left the University here, I didn't feel that I should stay on campus. I recognized that others had done this. Their circumstances may be different, but I felt that—I

just didn't feel it quite fair to stay on campus and I was fortunate enough to have the opportunity to go to one or two other schools. I chose to go down to Springfield which enabled us to keep our home in Amherst and this was certainly very attractive to Grace and to myself. Her friends were here. I could commute, even though while here I used to walk back and forth all the time on campus, and I recall discussing my retirement with Bob [Robert W.] Van Houten who was President of the Newark College of Engineering and about that time I had made up my mind to go with Western New England College. And we happened to be at a meeting down in Houston, Texas. I guess, went out for a walk and I mentioned that I guess I was going with a small, unaccredited school in Springfield, Massachusetts and I said, "You know, Bob, there isn't much prestige associated with that." And he looked at me and he said, "What's that, George?" And here he was President of Newark College of Engineering—so I left. There were other factors that I thought of perhaps later, I was a product of private engineering education. Here was a chance to go back into private engineering education and in a sense pay back the debt that I thought I might owe to them. It was not due to any feeling against anyone or against the University that I left, I had a very happy thirty years here, but it was the time to go.

CADIGAN: I can remember one night at your house when you were considering two alternatives. You had gotten them down to two. One of them was going to work with some agency in Washington, Federal agency.

MARSTON: Yes

CADIGAN: Then the other choice that you had was with Western New England College.

Just parenthetically during my period in the Registrar's office, I was offered, oh, you got job offers or hints of them and I was offered three very definite ones. Fran [Francis C.] Pray down at Pittsfield had some suggestions one time about going down there and another one was, well I can't remember what it was now—it didn't impress me apparently. But the other one was at the time that Bob [Robert S.] Hopkins and I were both approached and we were both much younger, both younger, and I was known largely because I got out speaking a lot. We were approached to be candidates for the Presidency of Western New England College. And they picked Beaumont Herman ultimately. I didn't, oh, the other job, Carl Keyser got me interested, or tried to get me interested in going down and being Registrar at Worcester Tech. Maybe you were in on that?

MARSTON: No.

CADIGAN: Carl was, Paul Swan, I guess, went in there somewhere along in there?

MARSTON: Yes, Paul Swan.

CADIGAN: But I didn't even nibble at the Western New England job. Years later when I was with the Board of Higher education temporarily, Beaumont Herman came in to get re-recognized by the state of Massachusetts. I didn't tell him the story, but I've always thought how lucky, how lucky Western New England College was that they picked him and not either me or Bob Hopkins.

Anyway, you went on down to Western New England College, but also, they had an Engineering School that had been an ongoing School of a sort for a long period of time dating back to their former association with Northeastern University and I guess, I don't, by the time you came there they were getting up into the daylight hours in their courses, but for many years it had been a...

MARSTON: Night school.

CADIGAN: Night school. But it was not accredited.

MARSTON: No.

CADIGAN: But some of the programs, under, while you were there, you taught, were you also Dean down there?

MARSTON: Yes, I went down as Dean of Engineering and I stayed as Dean for five years and we were inspected down there by ECPD and not approved. And a year or two after I gave up the Deanship, we were reinspected and their Electrical and Mechanical programs were approved.

CADIGAN: Maybe you retired at the right time.

MARSTON: It may be.

CADIGAN: And then somewhere along the line, your own alma mater recognized you by

giving you an honorary degree if I remember rightly.

MARSTON: Yes, I guess that was back in 1958 or so. They gave me an honorary doctorate and I remember Frank Rand commenting that now I wouldn't have to correct people when they spoke of me as Doctor.

CADIGAN: And of course Frank went through that for many years himself. I guess, until his alma mater, Williams, gave him one.

MARSTON: Yes. And one other comment that Frank Rand made when the Trustees made the decision on the naming of the Engineering building, I remember his writing a little note. I certainly didn't tell him about this, but he picked it up. In fact he used to get more Amherst news when he was in Florida than I got here in Amherst. But he dropped me a little handwritten note saying, "Congratulations, now you don't have to die unless you want to."

CADIGAN: Yeah, that's splendid.

Well, I want to thank you for the time you've put in on this. We will follow our usual procedure and get out a transcript. We'll have it typed up and then I'll go over it and fill in as much as I can and then ask you to fill in some blanks and so forth.

MARSTON: Sure, sure.

CADIGAN: And...

END OF TAPE 2, SIDE 2

NOTE: After reading the transcript of the interview, Dean Marston offered the following additional information in a written statement:

MARSTON

The following comments will supplement the oral part of our interview:

1. It might be of interest that the School of Engineering never had a personnel committee during my time. The matter was brought up as I recall in the University Senate originally

and Karl [N.] Hendrickson spoke against the idea, at least for the School of Engineering. His argument was that the Department heads and Dean were paid to make decisions and he knew of others who wanted no part in judging their peers. The administration agreed that no School would be required to have such a committee, but it felt it was desirable and those who didn't should review the matter every two years.

I guess we did, but there never was any call for such a committee.

2. Early in our existence as a School, there was organized an Engineering Faculty Wives group that took an active part in the social side of the School. They met several times a year at the Faculty Club or at members' homes and were very helpful in organizing the annual Engineering Family Christmas Party and the Family Picnic at Look Park in early June. It certainly was of great help to Grace, and I feel did a lot to build an esprit de corps within the School.

I recall one mistake I made. When Guinness Lab was nearing completion, I suggested that the wives decide on the colors for the various rooms. They worked at it, but I don't believe they ever arrived at a consensus—there were too many talented women in the group with definite ideas. I recall Mr. Appleton, the architect, saying to me when it came time to select colors for the Electrical wing—"Couldn't you and I select the colors this time?"

One other event stands out in my memory—a party for the University faculty, put on in the old Drill Hall. The women organized it as sort of a cabaret party with card tables with red-checkered tablecloths and they served coke and popcorn. The entertainment consisted of various skits, singing, stories, musical numbers, etc. Captain John [B.] Longstaff was master of ceremonies and did a terrific job. I still recall a couple of stories he told about the Navy helmsman who had imbibed too much torpedo juice (alcohol) and imagined himself and the wheel entangled in wires, etc.— I am sure that was the best faculty party that year. Also, I can see Norm [Norman C.] Card awarding a plucked chicken to someone for answering a question first and throwing a few eggs to other guests who came in second. No one realized they were hard-boiled.

3. Joseph [S.] Marcus joined our faculty in September, 1948, I think, as an instructor in a temporary position, as many of ours were. He and Dottie lived in a basement apartment in Thatcher dorm, I think, their first year. That was the year Steve Marcus was born. Miss [Helen] Curtis and I had some words relative to their continuing in the dormitory when it was learned that Dottie was pregnant, but with Treasurer [Robert D.] Hawley's

support and the fact Joe was a veteran, we prevailed, and the Marcuses finished out the year at the dormitory. From then on, Joe became more and more helpful. At one time, I think, he was teaching a course in each of three of our Departments. He developed our modest nuclear engineering program. He has always been a very effective teacher, a counselor students turned to and one who got things done in a cooperative and unobtrusive way. He was certainly my assistant dean, even though he never had the title in my time, and I am sure this position frequently put him "in the middle" between certain Department heads and myself, but he always managed to maintain a cooperative and constructive attitude. I personally owe a lot to Joe Marcus. I could depend on him and Carl [A.] Keyser to tell me when I was wrong!

4. Dick [Richard W.] Trueswell joined our faculty in I.E. in the fifties possibly, as an instructor. After a few years, he had the opportunity to work toward his doctorate at Northwestern University. It took him longer than he had originally anticipated and he was scheduled to return to us for the second semester as I recall. He came in to see me at Christmas vacation and mentioned that if he could only have another semester on leave he thought he could finish. He knew that we were short-handed and had counted on his returning, but I pointed out to him that "what was good for the individual, was good for the School" and that he should continue his leave, which he did. This situation did not endear me to Professor William [H.] Weaver at the time, as I recall, but we found a substitute at Western New England and survived.

Often faculty members recognize the overall needs of the School and sacrifice their own professional advancement to help out. I recall another incident where Bob [Robert K.] Patterson taught welding for several summers in our six-week summer shop program required of all engineer. He came in to see me one day about a promotion and I pointed out that he really hadn't done a lot professionally to earn it. I mentioned his summer teaching and how I considered that something like "peddling milk summers on the Cape—it supplements income, but..." He said, "But you needed someone to do it and I helped out." "Yes," I said, "But that's my problem, Bob, and I appreciate your doing it, but it doesn't count very much toward professional improvement and promotion." He may have asked, "Why didn't you tell me?", and my reply was, "You didn't ask." After that, he did considerable consulting work summers which certainly contributed to his professional background and he became a very capable teacher and faculty member.

5. I made my share of mistakes, as anyone does who does very much. One of the biggest perhaps was the hiring of Associate Dean Oscar [C.] Maier. He had an MS from California Tech. He had been in R and D most of his military career and a West Pointe graduate. He

had been director of research for Pullman Standard, Inc. For several years and we needed someone to develop our research and graduate program. He was recommended by Dean Fred [Frederick C.] Lindvall of California Tech whom I knew and greatly respected, but Dean Merritt [A.] Williamson of Penn State who had worked for Maier at Pullman Standard warned me against hiring him. But with our salary schedule then, we just couldn't attract the best. In fact, I did contact Ken [Kenneth G.] Picha, who succeeded me as Dean here, but he wasn't interested. Anyway, I hired Maier and he really didn't do very much for us in two years and I had to tell him he was through. He had previously had a serious heart attack and I am sure that had its effect. Since then, I have always been cautious about hiring such individuals. But I felt bad about the whole situation, for no matter what the circumstances are, to have to fire a man, reflects a certain amount of failure on both individuals' part. The only credit I could take from the whole experience was that at least I had "guts" enough to fire him before he got tenure.

6. Bob [Robert J.] Morrissey, Director of Placement, was of great help to the-School of Engineering. He was most effective in attracting company representatives to the campus and also in counseling our graduating seniors. I had many contacts with engineers and directors of technical personnel in industry and they all spoke most highly of Bob Morrissey and the service he offered them when they're recruited on our campus. Also, Bob was demanding of the highest ethical standards from both the recruiters and the students and made significant contribution to our students' overall education.
7. Three other faculty members probably should be mentioned in fact. As I look over all those who contributed to the development of our School of Engineering, I wish I could comment on all of them. One summer, Bob [Robert W.] Day, one of our own graduates, took summer employment with the General-Electric Company. That fall I met the man in charge of G.E.'s faculty summer program and asked how our Bob Day made out. He said, "Well, if you really want to know, we rated him one of the two best, out of over 150 faculty we employed last summer." Bob continued with G.E. several summers after that and became one of our better teachers.

Then there was Hans [C.] Duus, an early retiree from Dupont who came with us as an assistant professor in Chemical Engineering. He was a graduate of Carleton College with a doctorate from Harvard. He was a real scholar in the best tradition. He became a Commonwealth Associate Professor here. He was a most respected teacher, interested researcher and student of Danish literature. I always said he might have been the best bargain we ever got in faculty recruiting.

I still recall the time when Karl Hendrickson told off President Mather in the Faculty Senate. Mather had made some disparaging remarks about the state of Maine having more cows than people and criticized Registrar Lanphear. Karl got the floor and really let Mather have it. He is from Maine and said Mather's statement about Maine was untrue. Then he proceeded to point out that Mr. Lanphear was one of the most respected men on campus and to criticize him, and while he wasn't present, was most unfair. Mather took it as he had to, but everybody there agreed that Karl had done a job that needed doing and had demonstrated real courage in doing it.

8. In closing, I will mention two students whom I remember vividly because of certain incidents. I used to invite graduating seniors in for an interview before the recruiting season started, to get acquainted with them and to give them a little experience. This "senior electrical" came in one day and I asked him to tell me about his extra-curricular activities while here on campus. He said he hadn't done anything but study. He hadn't joined a fraternity or been in the Glee Club or anything. But he did mention such activities in high school. Finally I said, "Well, how do you account for this change in your activities from high school to college?" He replied, "In high school, I made a below average academic record. My parents didn't think I was college material and my guidance counselor told me I shouldn't consider college and under no circumstances try engineering. But college had a lot of glamour for me and I wanted to give it a try and now I am graduating in E.E. without having failed a course." I often used his example in talking with other students to illustrate how important motivation is.

Then there was the student who never made a very good academic record. He wouldn't have graduated in four years, which incidentally wasn't very unusual in engineering, but he also got drunk one night and drove his car through a construction barrier and not being satisfied with that came back and did it again. By then, the campus police got him and he was expelled from college. A year later, he was readmitted and while working about twenty hours a week to support himself, made all B's and A's. It came to the recruiting season in the Spring and he took many interviews but received no offers. He was perfectly honest and when the recruiters asked why he dropped out of school a year, he told the truth. I got interested in his situation and wrote to recruiters at three large national companies raising the question—"Would you offer a young engineering graduate a position in your company knowing that he had been expelled during his junior year for drunken driving, etc., but who came back a year later and made a fine academic record, etc., and had apparently learned his lesson?" Two companies replied immediately saying, "No, we wouldn't take a chance." He might have learned his lesson,

but that by doing so they were taking a chance they preferred not to consider. If one of their employees had a similar experience they would not take action against him until his case came before the courts. Thus, the student was in a tough situation we recognized, and Professor Longstaff, Bob Morrissey and I spoke to several recruiters about his case and finally Ken Jackson of Chicago Pneumatic Tool Company of Utica, New York agreed to give him a chance. The last I heard, he was doing very well with the company. He was a capable engineer, but learned his lesson. There was a family history of drunkenness in his background which I will not go into, but he came through the experience in fine shape—I have always said that education on a college campus is not limited to classes or students. Even some faculty and administrators learn a great deal.