CHEMICAL HERITAGE FOUNDATION

ROBERT D. KENNEDY

Transcript of an Interview Conducted by

James G. Traynham

at

Danbury, Connecticut

on

4 February 1997

(With Subsequent Corrections and Additions)

ACKNOWLEDGEMENT

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Robert Kennedy

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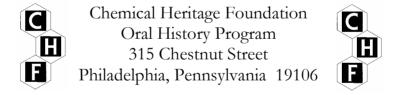
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ROBERT D. KENNEDY

1932	Born in Pittsburgh, Pennsylvania, on 8 November
	Education
1955	B.S., mechanical engineering, Cornell University
	Professional Experience
	Union Carbide Corporation
1955-1956	Edgewater Research Laboratory, National Carbon Division
1956-1963	Sales and Marketing, National Carbon Division
1963-1971	Marketing Management, National Carbon Division
1971-1975	European Products Director, National Carbon Division
1975-1977	Senior Vice President, Union Carbide, Europe
1977-1982	President, Linde Division
1981-1982	Senior Vice President
1982-1985	Executive Vice President
1985-1986	President and COO, Chemicals and Plastics
1985	Member, Board of Directors
1986-1995	President and CEO
1986-1995	Chairman of the Board
	<u>Honors</u>
1991	International Palladium Medal, Société de Chimie Industrielle, American Section
1995	Chemical Industry Medal, Society of Chemical Industry, American Section
1998	Henry Laurence Gantt Medal, American Society of Mechanical Engineers

ABSTRACT

Robert Kennedy begins the interview with a discussion of his family and growing up in Pittsburgh and New York. Kennedy initially considered a career in journalism, but his family persuaded him to pursue engineering. He entered Cornell University as a mechanical engineering major, receiving his B.S. in 1955. After graduation, Kennedy was offered several jobs in his field. He chose to work for Union Carbide Corporation due to his interest in Union Carbide's metallurgical industries; he worked in this area for twenty years. He began a management career with Union Carbide in the company's European division in Geneva, Switzerland. Upon his return to the United States seven years later, Kennedy became head of Linde Air Products Company, a division of Union Carbide. After the Bhopal incident, Kennedy adjusted his corporate management style as Union Carbide found itself in a transitional phase. The company embarked on a massive restructuring program. As CEO of Union Carbide, Kennedy helped to rebuild the image of chemical industry by serving as a representative with the Chemical Manufacturers Association (CMA). He helped to instill the Responsible Care program into CMA's agenda. He concludes the interview with reflections on education and thoughts on his family.

INTERVIEWER

James G. Traynham is a Professor of Chemistry at Louisiana State University, Baton Rouge. He holds a Ph.D. in organic chemistry from Northwestern University. He joined Louisiana State University in 1963 and served as chemistry department chairperson from 1968 to 1973. He was chairman of the American Chemical Society's Division of the History of Chemistry in 1988 and is currently councilor of the Baton Rouge section of the American Chemical Society. He was a member of the American Chemical Society's Joint-Board Council on Chemistry and Public Affairs, as well as a member of the Society's Committees on Science, Chemical Education, and Organic Chemistry Nomenclature. He has written over ninety publications, including a book on organic nomenclature and a book on the history of organic chemistry.

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INTERVIEWEE: Robert D. Kennedy

INTERVIEWER: James G. Traynham

LOCATION: Union Carbide Corporation

Danbury, Connecticut

DATE: 4 February 1997

TRAYNHAM: Mr. Kennedy, I know from what I've read that you were born November 8, 1932, in Pittsburgh, Pennsylvania. Can you tell me something about your parents and your childhood?

KENNEDY: Well, Pittsburgh was my hometown, and we grew up there off and on. My father worked in a family business, but unusually, he also had a professional singing career. When the singing business was good, we lived in New York. He was on network radio and did a lot of concert work. When the singing business wasn't so good, we were back in Pittsburgh in the coal and lumber and builder-supply business. I grew up in a routine way in Pittsburgh, and then went off to Cornell.

TRAYNHAM: Let me ask you something about your pre-college days in Pittsburgh. You went to the public schools there?

KENNEDY: I went to public schools for awhile. Then, for my last three years in high school, I went to a small boarding school up in New Hampshire called the New Hampton School. All of my brothers had preceded me there. I think we were indifferent students in high school—in public school—in Pittsburgh. The family sent us away to give us a little bit better discipline in academic work. [laughter]

TRAYNHAM: It worked, then.

KENNEDY: It worked pretty well. Of course, my older brothers were caught up in World War II. They had sort of interrupted educations, but we all finished the university. I was the only engineer. I was the youngest of four boys.

TRAYNHAM: When did your interest in engineering develop?

KENNEDY: It was a kind of reluctant interest. I actually wanted to go into writing and journalism, but the family persuaded me. I had pretty good grades. I was sort of an honor roll student through high school. The family persuaded me that one of us ought to try engineering. It would be a better background for whatever career I might choose. I did; I went to Cornell.

The first couple of years were pretty tough for me. I was in mechanical engineering. Then my father died, and I had to get pretty serious. The last three years were better. I was in a five-year bachelor program. The school did an enormous amount for me, Cornell did.

TRAYNHAM: While you were there, did you ever have any chemistry courses, since you're associated with the chemical industry?

KENNEDY: Yes. In that five-year program, everybody was required to take a general chemistry course. Then we took organic chemistry and physical chem. I think that was all of the chemical exposure I had. We had a lot of metallurgical work, too: materials, and metallurgical, and cooling curves, and all that kind of stuff. Also thermodynamics, I guess.

TRAYNHAM: Did you go straight through Cornell in the five-year program, or were you in kind of a co-op program?

KENNEDY: No, I worked right through for five years. After my father died, it was all supplemented by grants from the university, and loans and summer jobs. My summer jobs were in construction and hard labor. [laughter]

TRAYNHAM: Well, when you graduated in 1955 from Cornell with your bachelor's degree in mechanical engineering, what were your employment choices?

KENNEDY: Well, times were pretty good in the mid-1950s, coming out of a school like Cornell. There were really a lot of choices. I think I probably had four or five job offers, all with companies involved in some kind of industrial manufacturing or in the oil industry. Union Carbide was a company about which I knew very little, but I was very, very impressed with the people I talked with. Maybe this is the way it is with young people. When you read about corporations and annual reports at that age, it doesn't mean a hell of a lot to you. I think you go more on gut feel and instinct.

Carbide offered me a job in a part of their business, which served the metals industries. I had been particularly interested in the metallurgical engineering courses I took at Cornell. I did

well in them, and I liked it. Maybe growing up in Pittsburgh, I was kind of a hot-metal guy. I started with the carbon products division of Union Carbide, which made the graphite electrodes for melting steel in electric arc furnaces; carbon blocks, huge big carbon blocks for lining blast furnaces; and nuclear graphite for the whole nuclear program, which was pretty big in the 1950s—reactor graphite. That kind of thing.

TRAYNHAM: When did you decide that you were interested in management?

KENNEDY: I don't know that you ever make a conscious decision. I was always kind of <u>in</u> management. I was a class officer most of the way through high school. Then at the university, I was president of the fraternity house and an officer of the inter-fraternity council. I just sort of gravitated toward it. I sort of liked organizing things. It happened, and I enjoyed it. Then, I'm sure that the people who were my role models when I was a kid, the ones I looked up to, were either sort of the campus leaders, or athletes, or some combination of the two, athletic leaders. Those were my heroes, and those were the people I wanted to be like.

TRAYNHAM: During most of your years with Carbide, you've been associated with the chemical part of Carbide. What has been your experience with innovation in chemistry during that time?

KENNEDY: Well, it's been the kind of love affair that the neophyte and the uneducated have with any art or discipline which you can admire a lot, even if you're not a great practitioner. [laughter] Carbide was such a conglomerate. I spent my first twenty years in the mining and metals and metal industry-related part of Carbide. This was in carbon and then in ferro-alloys, and then a little bit later in gases. Carbide had a very big business in industrial gases—the air separation business, oxygen, nitrogen, argon—which really is all chemistry, but it's not polymer chemistry.

I had been kind of a group executive over on the alloys, gases, and carbons side of Carbide. I was asked to move over as the head of the whole basic petrochemical business of Union Carbide. This was basic C-2 chemistry. My education in ethylene-based chemistry really started in earnest in the 1980s.

I had this experience, though. For some crazy reason, this was one of the bounces that the ball takes in life. When I first started in training in 1955, the fellow who was kind of the vice president of marketing—I was enjoined in the marketing and sales organization—had the idea that it would be a good idea to put a trainee out in the research laboratory of the carbon business. It was in Edgewater, near Cleveland, Ohio. I spent about four months in the research laboratory as a research assistant to a very serious research chemist. At that time, that part of Union Carbide had deliberately hired in a lot of very fine scientific people who had come from the Oak Ridge National Laboratory. Carbide had the contract responsibility, under the

government, to run Oak Ridge and Paducah, Kentucky. They had some fantastic scientists down there, all Ph.D. chemists. The carbon folks went after them because they were interested in really getting into basic carbon chemistry. It was high-temperature research work for synthetic graphite and duplicates of synthetic graphite, for example boron nitride. It was nuclear graphite—ultra-pure graphite—for the nuclear reactor program, and even the combination of graphite with uranium in uranium carbide as a fuel element for it.

For all the scientists there at the research lab, they had seminars every Friday. Three or four guys would get up and give papers, and they'd have a discussion of them. As a trainee, I was allowed to go and sit in on those. I had such an enormous admiration. I don't know, I just loved to go in the cafeteria and sit with those folks and listen to what they talked about. I also began to think that the organization and management of scientific people is maybe one of the most difficult jobs in corporate management. That is, how to harness these brilliant people in a constructive way, and yet not crimp their innovative instincts. The question is largely, "How far do you let inventors and innovators and basic researchers go down a path before you say, 'Well, that doesn't look like it's going to be commercial in any near timeframe. Can't we focus a little bit more on things related to our business?" I still think that that is an incredible challenge, both for management and for industry in general.

TRAYNHAM: What was your experience with scientific teamwork in that period?

KENNEDY: I guess I'd follow two answers to that. The kind of teamwork and collaboration that goes on between teams of scientists themselves, I think, is highly dependent on the personalities and the intellect of the individuals. I think explorers in the scientific area, and researchers, can be very prickly about their work—and very proud, as they should be, about their own proprietary work. That is their lifeblood. I think it's hard to force that between research individuals who just don't hit it off, or don't make the intellectual connection, or don't value the particular contribution that each can make.

On the other hand, the sort of teamwork that takes place between the research bench and the outside world—between research, let's say, and manufacturing or process technology or design engineering, or even product development in the marketplace—that can be a very useful collaboration. There's generally more willingness to recognize the limitation of one's own expertise and say, "Well, you know, I really don't know a lot about how to translate this and scale it up into an economic commercial-size project." Or, "I do realize that there's a market out there and customers out there. Just turning out my invention, in the form that it's in, may not be the form that is most acceptable to the marketplace, so yes, I'll work with those market development people—and the customer people, even. I realize they're probably not as superior beings as I am intellectually—but they have a point of view and they pay the bills." [laughter]

TRAYNHAM: Tell me something about your experiences in company management. I believe you were overseas for awhile.

KENNEDY: Yes. I actually started with an international assignment rather early in my career. I was still based in New York, but I was coordinating business and market development operations worldwide, starting about ten, twelve years after I came with the company.

I just thought it was fascinating to explore the markets in other parts of the world, different cultures, different ways of doing things. We had a lot of manufacturing overseas. I gained an appreciation for the problems of migrating technology and know-how around the world. I was sort of coordinating so that if you had a customer in Turkey—this is a real example—we could have supplied that customer in Turkey from any one of five different plants of Union Carbide. Left to their own devices—those were all different-country companies—they would have quoted five different prices and five different qualities, at least. Someone had to coordinate that, so that to the marketplace, we looked like rational people. I enjoyed that experience enormously.

TRAYNHAM: Where were you based overseas?

KENNEDY: Well, first in New York, traveling the world. I remember, my first year I was out of the country about twenty weekends. After that, we moved to Switzerland, which was our European headquarters for Union Carbide—in Geneva.

TRAYNHAM: How long were you in Geneva?

KENNEDY: Six, almost seven years.

TRAYNHAM: Did you develop a facility with the French language during that time?

KENNEDY: I was okay. I'd had a lot of French in high school, and it stood me in good stead. I gave some speeches in French. I had trouble with the verb forms, but that was all. [laughter]

TRAYNHAM: Apparently, you communicated satisfactorily.

KENNEDY: It worked okay, yes.

TRAYNHAM: Good. After the nearly seven years in Geneva, you returned to New York, then.

KENNEDY: I came back to the States. I was sort of parachuted back in as the head of the industrial gases division of Union Carbide, which was called Linde at that time—now Praxair.

TRAYNHAM: That was a shift from your earlier metallurgical work, then.

KENNEDY: That moved me out of the carbon ferro-alloys mining area into gases. It was a pretty good experience.

It was still dealing with an area that I was pretty comfortable with, that is, the steel industry. It included big air separation plants to provide oxygen for basic oxygen furnaces, and argon for specialty steels and stainless steel processing. All the welding in steel and metal working applications. A big nitrogen demand in the chemical industry. This started to push me more toward chemicals, both oxygen and nitrogen, in the chemical industry, and nitrogen in food-freezing applications. Specialty gases for electronics work. That's a very solid and good growth business worldwide.

TRAYNHAM: From there, you moved into other management positions, I believe.

KENNEDY: Well then, I kind of got a group job overseeing gases and nuclear for a while. Oak Ridge came under me, and some of our area companies—Canada and all of Latin America, for all products. Then I moved over to petrochemicals in the early 1980s, which was about twenty-five years after I'd started with the company and sixteen years before I retired.

TRAYNHAM: What particular changes in management or management style have you taken note of during your career with Union Carbide?

KENNEDY: Well, from its inception when Carbide was put together in 1917, it was put together as a conglomerate of businesses. The original business was the calcium carbide business; that was the original Union Carbide. They made calcium carbide in a smelting process, which was then used to generate acetylene gas. The Linde Air Products Company was the first in this country to commercially separate air and provide oxygen for, at that time, mostly metallurgical processes in welding and so forth.

Then there was the old carbon business, which is the oldest business of Carbide. Its inception was in 1886. Its first products were making carbon arcs for electric street lamp lighting and little carbon electrodes that were the core of dry-cell batteries. That spawned the Eveready Battery business. They were making carbon brushes for rotating electrical equipment,

and then later got into big carbon and synthetic graphite for electric steel manufacturing. Those were the original businesses of Carbide.

The chemical business was really spawned by research done with the funding of Union Carbide at the Mellon Institute in Pittsburgh. It started with the work on acetylene. During World War I, when the Europeans and the Germans had introduced the use of poison gases, one route to mustard gas, I believe, was starting with acetylene as the base material. Union Carbide was the foremost manufacturer of acetylene. Acetylene at that time not only was a cutting gas, but was used in the automobile and miners' lamps and automobile headlights, the old Prestolite headlamps. The government asked Carbide to do some work on acetylene chemistry and to prepare some defenses against the poison gases being used by the Germans.

That work never produced anything during the war effort, but it did lead to the synthesis of ethylene. Up until then, ethylene had only been produced by reduction from ethyl alcohol. It had never been synthesized from a gas base. The early Carbide scientists, George Curme being the leader of the group, began work to strip ethane out of natural gas and convert ethane, and crack it into ethylene. It was a very crude process, but it began to look interesting. With that, the work moved from the Mellon Institute on a contract basis—although Carbide maintained a lab there for a long time—to a small plant in Clendenin, West Virginia. West Virginia was the closest place to Pittsburgh that had natural gas that had a fairly high content of ethane.

The first gas stripper was built in Clendenin—it came off of a natural gas pipeline—to synthesize ethylene. I believe I'm correct. At least, all of our history books say that that was really the first commercial synthesis of ethylene in North America. That led to, then, ethylene oxide, which is a very, very difficult material to handle; the hydration of that to ethylene glycol; and a whole series of derivatives of the oxide and glycol molecules. That went through the 1920s.

The early reports of Carbide technical people and historians, who have set down this work through the 1920s and the early 1930s, was an incredible and rich proliferation of whole new chemical families: the esters and the glycol ethers, for example. They found their way into paints and solvents and coatings. I don't think that early Union Carbide ever knew there was a depression in the early 1930s, they just kept inventing so much stuff. The plant in Clendenin became a plant in South Charleston, West Virginia, and then was joined by another plant at Institute, West Virginia. That was the beginning of it. Then this led to the move southwest to more abundant sources of the natural gas and ethane and propane.

The synthetic ethanol came along in the late 1920s—curiously, in the middle of Prohibition. Of course, it was properly used for medical purposes and also for automobile antifreeze. The first ones were ethanol. Of course, that would boil off. During Prohibition, we were the largest producers of this synthetic ethanol, that is, ethylene-based rather than cornbased or sugar-based. We had government inspectors in our plants just because of Prohibition, just to check every gallon that was made and to certify that it was going into purposes for which it was legally allowed. Then came the quick transformation to the use of glycol as an antifreeze.

That was the beginning of the Prestone business. Literally, the proliferation of new chemistry in the late 1920s and right through the 1930s was most impressive.

It probably happened in Carbide—in a business sense, in a commercial sense—in a very unorganized way. There wasn't a molecule that Carbide wasn't in at some time—the styrenes, for example, which we're no longer in. Through the acquisition of [Leo H.] Baekeland's company and invention—I think the acquisition happened about 1927—that brought in the whole phenolic chemistry work and the Bakelite materials. The plant in Bound Brook, New Jersey, and the research laboratories in Bloomfield and Bound Brook were an important part of that. That got latched up. The polymer chemists in Bound Brook and the chemical chemists in South Charleston.

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KENNEDY: The manufacture of polyethylene began to look interesting. Carbide didn't have in its chemical research area, or in its polymer research area—in plastics as they were known then, and the thermosets and the phenolics and the epoxies—Carbide didn't have in those areas the kind of expertise, the kind of process engineering that could build high-pressure reactors for handling ethylene as a gas under very, very difficult conditions.

They reached out to the gases division—the Linde air-separation people—who were building air separation plants in their technical center in Tonawanda, New York. They had some brilliant scientists themselves: process chemistry people, compression people, gas-handling people, air-separations people. They brought those people into South Charleston and said, "Help us build something that will make polyethylene." They did that. In fact, the first pilot plant work was done in Tonawanda, New York. This then was the beginning of Carbide's venture, and really this country's venture, into a polyethylene using the high-pressure process. I think the Ziegler [-Natta] and chromium catalysts came later, in the 1950s.

TRAYNHAM: Where were you in the company management when these things developed?

KENNEDY: Oh, I was still in knee pants then. That was in the early 1940s.

TRAYNHAM: All right.

KENNEDY: During World War II, part of the Lend-Lease Program—this is little known—when President [Franklin D.] Roosevelt got Congress to send destroyers and vessels and tanks and such to the UK, there was not a hell of a lot that the UK could pay us back with except IOUs. There were some very interesting technology exchange agreements. Imperial Chemical

Industries [ICI], the British chemical company, was ahead of us in the synthesis of polyethylene, both in the catalysis and in the process chemistry. They gave to the United States their rights and their know-how in the technology. That went and was shared by DuPont and Carbide. The great need for polyethylene was to replace rubber for jacketing of electrical wire and cable, in communications particularly—anywhere that you weren't using the wonderful abrasion-resistant characteristics of natural rubber.

By the end of the war, the polyethylene business was very interesting. It had permanently indicated its ability to replace natural rubber and other natural substances in a wide variety of applications, but wire and cable, notably. Carbide and DuPont literally shared the market, about 50 percent each. The polypropylene came along a little bit after that. The styrene came along a little bit after that.

Carbide was early in silicones. Again, they relied on technologists from the Linde Air Products Division, who developed the silicon chemistry. Then it was transferred over into the chemical side of Carbide.

I guess life went on in a pretty good way for Carbide up until about the time of the oil shock, the first oil shock in 1973. When oil was less than two dollars a barrel—and in 1973, I think it was still around two dollars a barrel—the raw material world was not a problem. The ability to synthesize, and the proliferation of new molecules and new process chemistry—it just seemed like there was just no end to how good the world of chemistry was going to be. The oil shock caused—in 1973 and 1974, and then again in 1978—major, major change in the chemical industry and in the petrochemical industry as we know it.

Well, some of the major oil companies—Exxon, notably—had been pretty aggressive in financing and developing their petrochemical business. Exxon was the first one to kind of organizationally recognize it by setting chemicals up as quite a separate arm of the oil company, and moving them out of headquarters, and giving them their own field to play in. For most of the others, petrochemicals were just sort of a byproduct of this. It wasn't a major game to play.

With the change in the flow of oil from the Middle East and the organization of that, as the Arab countries took over control of the price of oil at the wellhead and Aramco changed totally from what it had been, the oil companies began to look in other areas for major investment and growth. They came into petrochemicals in a big way. This changed the world for Carbide and others—DuPont maybe not so much, because they were both bigger than Carbide and much broader in non-petrochemical areas. They were big in petrochemicals as well. Dow was somewhat less affected probably because they had a big stake in inorganic, and again, more diversity.

It changed the world for Carbide. Growth slowed down; the proliferation of competitors turned the ethylene and ethylene-chained businesses largely into fundamental commodity businesses, very cyclical. At the same time, all of Carbide's other diverse businesses—the old conglomerate of consumer products, by this time Eveready and Prestone and Glad Wrap—were big consumer names. The market was confused about Union Carbide. They didn't know

whether we were a consumer company or a ferro-alloy metals industry company, or what. This was a tough period in sorting out what we were really good at.

Fortunately, the inventory of technology leadership, particularly in process technology—we'd pretty much stopped inventing new molecules somewhere between the 1950s and the 1960s. Our expertise turned more to process chemistry and process innovation: being able to scale up manufacture to large and very low-cost processes, new catalyst development. This became sort of the reservoir on which Carbide fell back. It really has been the springboard for the success of Carbide in the last ten years, the process technology and the catalysis.

TRAYNHAM: You were certainly involved in management during that transition period.

KENNEDY: Yes.

TRAYNHAM: Did you feel that there was a change in corporate management style to accompany the change in the emphasis on production?

KENNEDY: Well, there was. There were a lot of contributing factors: exogenous factors, external factors, pressures. The gas release and tragedy in Bhopal, coming after the oil shocks—I'm not comparing these in any way, except they were both really extremely important and somewhat tragic events in the history of this corporation. Bhopal, which happened in December of 1984, came at a time when the corporation was kind of in disarray. The petrochemical business had been in a prolonged slump with great over-capacity in the industry. Nobody was making any money. The metals-related businesses were not doing well at all.

The only stars in the corporation were really the consumer products businesses: Eveready and others. They were much more resistant to movements in the business cycle. They were kind of glamour businesses. Consumer products had a lot of glitz and glamour at that time. The publicity, the litigation, the uncertainty created by the tragedy in Bhopal had a <u>terrible</u> effect on the morale of the people of Carbide all over the world. The shares of Union Carbide, even before Bhopal, were only selling at seventy percent of the book value of the corporation. This reflected the kind of business turmoil and the results of the energy crises, and so forth.

Well, after Bhopal, the stock went down by about half. Now, it's about 35 or 40 percent of book value. You'll remember, the 1980s was the period of lots of corporate takeover activity and junk bonds—Michael Milkin and Ivan Boesky and the barbarians-at-the-gate kind of mentality. A lot of financial jiggery-pokery was going on. Sure enough, within a few months after Bhopal, speculators began to buy in Carbide stock. Irrespective of the unknown litigation and settlement costs of this tragedy in India, the stock was too good a bargain. People could see the intrinsic value of some of these businesses was pretty high.

That led—almost a year to the day after the gas release in Bhopal—to an announced hostile takeover attempt by a much smaller chemical company, GAF, who said that their purpose was to borrow enough money to acquire Carbide on the strength of the assets of Carbide. If they were successful, they would break Carbide up, and they would sell off the family jewels—the consumer businesses, which were easy to sell off—and they'd sell off some of the other good things. When they were all done selling off and paying back their debt, they would've retained the chemical business for nothing, for free. It was a pretty good scheme. The great uncertainty was the unknown liability of the aftermath of Bhopal.

We did what most managements did at that time. We got into a bidding war for our own shares. We said, "This guy's going to buy our shares, well, we'll buy them back too. We'll just have to outbid him." He lost heart at a certain level.

We agreed to buy back our own shares, which meant we had to go to the banks and borrow a hell of a lot of money. Essentially, we had to do at least part of what he said he was going to do: that is, to pay off this debt, we had to sell off the family jewels. You can imagine: if morale was bad after Bhopal, it was even worse after an unfriendly, hostile takeover attempt, which left us saddled with about five and a half billion dollars' worth of debt—very high-priced debt. We had three series of junk bonds: one was 15.5, one was 16.5, and the other was 17.5 percent interest rate. It was awful. The covenants on the debt didn't permit us to really turn around and do anything without the permission of the lenders. We couldn't acquire anything; we couldn't sell anything; we couldn't reorganize anything. [laughter] That was about the low point, at the end of the takeover attempt and the sale of the businesses.

TRAYNHAM: Where were you in the management at this point?

KENNEDY: I was president of the corporation then. The chairman, Warren [M.] Anderson, was a great, heroic man. He was also CEO at the time of the Bhopal release, and he was two years away from retirement. He was chairman through the hostile takeover attempt, and then he was one year away from retirement. In the course of things, I had been appointed president about six months after Bhopal. Then, after the takeover attempt, about six months later, the board announced that Warren was going to retire at normal retirement age at the end of that year. I would take over as CEO during the year, and become chairman then, after he retired.

It all went very rapidly. When you're forced to sell off businesses in a circumstance like that, literally with a gun to your head, it's messy. You don't get the best bargain. You just go out and get it done under a time deadline. There were lots of pieces and bits of the remainder of Carbide still around: the gases business, and the carbon business, and the ferro-alloys business, and the silicones business, and some other electronics things and so forth, that we'd dabbled in. We still had about ten principal businesses—even after consumer products was gone—and a lot of debt, and lousy morale.

It was really time to take stock of, "What can you salvage out of this?" That was really the issue. When I would talk to security analysts or the press, or anybody—newly hired engineers—the question that people typically liked to ask is, "What's this organization going to look like in five years? You've just become CEO in 1986. Where do you want to take this?" I mean, obvious questions. Well, I didn't have the foggiest damned idea. [laughter] We'd just gotten over the worst kind of shocks—and had not gotten over them: we'd just gone through this, and were trying to catch our breath, bloody and battered. [laughter] I had no vision. I said some words. Usually, what I said was, "Well, I've worked in all the businesses of Carbide. I really believe that we had some great businesses. I knew the products; I knew the technology; I knew the markets; I knew the customers. It didn't work as a conglomerate, but I did believe that we had some great businesses." We had either very large market share, or low-cost position, or best technology for producing something.

It took a while. I took over in 1986. We had some good luck in 1988 and 1989, because the chemical industry went through really what was kind of an all-time peak. Supply and demand came close together for the first time in about ten years, and prices shot up. Even if you were dumb and blind, you could make money in 1988 and 1989. We made a ton. That took the pressure off. We did some re-financing, got rid of all of that high-cost debt, paid down a lot of debt, caught our breath, put some more money into physical plant and facilities. Probably we got a little bit euphoric, and we thought, "Well, it'll never end. Now, we're back on the right side." That was not correct, because by 1990, the bloom had come off the rose again in chemical margins. Profits were way down again. We were back to examining the need for restructure of the corporation and re-engineering.

I told the board in 1989 that I wasn't at all sure that it made sense to keep unrelated businesses together in the same portfolio—that they were all very capital-intensive. The job of top management for many years in Carbide had been to kind of sort out the loaves and the fishes between all of the hungry businesses that wanted a lot of capital, and you didn't have enough. You'd have to kind of parcel out the scarce resources, using what we thought were very sophisticated strategic planning measurements. I'd become convinced that the market was a better allocator of capital than corporate management. No matter how sophisticated our investment criteria and our investment analyses would be, you're always subject to being importuned by the last guy who got to the chairman with his pet project and got the chairman's ear about what a great deal this was. The businesses were strategically quite unrelated.

I got the board and the corporation prepared in terms of tax implications and organization for a separation of businesses into independent companies—publicly-traded companies. I said, "Let the chemicals guys focus on what they can really do best. They've got to compete in capital markets; they've got to compete for shareholder attention. Let the gases guys go out and compete with BOC [British Oxygen] and Air Liquide in their own field," and so forth.

As we were doing this, we went through a massive re-engineering and restructuring program. It was <u>very</u> effective. We took more than a third of the total fixed costs of the corporation out. In 1990, our fixed costs were one billion seven hundred million dollars. By

1995, we took about six hundred million dollars of fixed costs out, in the same measurement of constant dollars.

We did it by getting rid of work—by just looking at every work process that went on in the corporation, and saying to ourselves, "Why are we taking so many steps and such a long time to do this? How can we simplify the work?" You can make people go away, but if you don't make the work go away, the people come back. You've got to get rid of work. We were coming from way back. Our productivity was the lowest in the industry. We were a very fat organization. There was a tremendous reduction in levels of organization. I suppose when I took over there, probably between me and the guy on the shop floor or the field salesperson were probably twelve or thirteen layers. I think we're down to about seven now.

Communications improved. We spent a <u>lot</u> of time internally talking about what we were trying to do, spelling out the vision. You got sick of your own voice, talking over and over and over again to people. You couldn't tell them once. You had to repeat it and demonstrate it and live it, and then you had to show them some results. Our people had been through so bloody much tragedy, they were skeptical that there was anything—any ice cream at the end of the day.

It worked out pretty well. The stock of all of those companies—the aggregate value of that—has gone up about tenfold since 1990. The businesses are doing very well, even though they're not part of Carbide. The chemical business is doing very well. They went back to innovation for growth, new process technology, and all kinds of exciting things.

TRAYNHAM: It was obviously a happy decision you made to stay with the company. However, I've learned from some published material that shortly after the Bhopal tragedy, you had offers for executive opportunities elsewhere. Some management personnel in Carbide did take opportunities to move. What was it that kept you at Carbide?

KENNEDY: Well, I personally never had an offer.

TRAYNHAM: Oh, I misunderstood.

KENNEDY: I was never even approached. [laughter]

TRAYNHAM: That's contrary to what's published.

KENNEDY: No. In forty-one years with the corporation, only one time did I think about writing a resume and seeing if I could find another job. That was back in the late 1960s. I had

mentioned that I had been traveling overseas extensively for three or four years, and I was pooped. They were running my tail off and I was a little bit unhappy with some of the organization things that were going on.

I wrote a resume and I put it out, and I found out I wasn't in great demand. [laughter] I told my bosses. I was right up-front with them. I said, "I'm unhappy." Before anything happened, they came and said, "How would you like to move to Geneva, Switzerland?" I said, "Right now." They said, "Don't you want to go home and talk to your wife?" I said, "No. [laughter] I'm ready to go. We've talked about it and hoped for it, and I'll go right now." I went to Europe and stayed for seven years.

No, I was just very lucky, Jim. As I say, after Bhopal, Warren Anderson came and made me president over all the chemicals—six months after Bhopal. I really figured that it was a great opportunity. I loved the people, and I was pretty familiar with the history. I figured, "It <u>can't</u> get any worse." I mean, what else could happen? We had Bhopal; we had the takeover attempt. If you can't go any lower, then it's not a bad time to become the leader, if you think you can only get better. It took a long time—I was CEO for ten years—but it got better.

[END OF TAPE, SIDE 2]

KENNEDY: To give some substance to my comments about the process technology and the innovation of Carbide—and every chemical company that's been around for any time has wonderful stories to tell about the scientific developments and the business developments of their company. If you go back over the history of the chemical industry, look at, for example, the top industry recognition: the Kirkpatrick Awards, the Perkin Medal. I think the Perkin Medal first started—the SCI [Society of Chemical Industry] first started awarding the Perkin Medal—in the 1890s sometime. I believe I'm correct in saying that there are more Carbide people among Perkin Medal winners than any other corporation in America.

Interestingly, in the early days of the Perkin Medal, a lot of it—as you might imagine—was electrochemistry or metallurgy. Edward G. Acheson, who was the inventor of synthetic graphite and then later on carborundum, was a Perkin winner about 1912. His Acheson Graphite Company became a part of the National Carbon Company of Carbide. Leo Baekeland, the Belgian who developed Bakelite and the phenolics, was another one. Then there was a guy whose name I've forgotten, in the middle 1920s, who got a Perkin Medal. His development was really an alloy during World War I, an alloy that was used in tanks to repel armor-piercing shells.

There was a lot of that in the early days. Then it got more into <u>chemistry</u>; chemistry and polymer chemistry—catalysis. Fred [Frederick J.] Karol was recognized for his work in polyethylene and in the development of the low-pressure process for making polyethylene, the so-called Unipol process. Edie [Edith M.] Flanigen was the latest winner. She was the first female to win the Perkin Medal. Edie got the medal for her work in molecular sieves, both for

adsorbents and catalysis. Then, the Kirkpatrick Award—somebody added up how many Kirkpatrick Awards we've received, and I think it's the highest in the industry. Most of it has been—well, I was going to say most of it has been on process technology, but that's not quite right. It's the commercialization. It's been wonderful for me, as a mechanical engineer, to just develop and enhance my appreciation of what chemists and chemical engineers have been able to do. It's really quite remarkable.

TRAYNHAM: The gas release at Bhopal occurred just shortly before you became CEO.

KENNEDY: Right.

TRAYNHAM: Did you have a sense that you were able to bring about a settlement because your attitude about the appropriate response from Carbide was significantly different from that of your predecessor?

KENNEDY: No, not at all. My predecessor flew to Bhopal right after the news came through, to try to meet with government officials and local people to try to do anything that was possible to help. When he arrived there—he flew over by himself—he was met in Bombay by the Indian chairman and the Indian managing director of the company. Then they went on from Bombay to Bhopal by plane. The Indian local officials met them at the plane, and then held them under house arrest for three or four days, and then expelled them from the country. They were never allowed to talk with anybody at any rank in the government. The whole purpose of the trip was frustrated. The politicization of the tragedy took place in just twenty-four hours—the uproar from the Indian press, particularly from the far left, about the multinational exploiters of the people.

When he got out there, he was sort of an embarrassment to the government. How do you deal with a man who comes with his heart on his sleeve and says, "I want to help"? If they met with him, they would have been accused of collaborating with the enemy.

It was a terrible thing. Warren came back from that badly abused and shook up. At a press conference here at the Hilton ballroom—must have been one hundred fifty people there; I was there—Warren said in response to a question from the audience, "We accept the full moral responsibility for what happened in India." That was just a spontaneous statement of the man. He spent the next two years doing everything he possibly could to find a way to reach a settlement.

Early on, there were lawsuits brought in federal court in New York. They were brought all over the United States, but they were consolidated in Southern District Court in New York. Judge Keenan was sitting on kind of a landmark deal. He wanted to be the instrument for forging a settlement, for showing that a kind of global tort worldwide damage thing could be

quickly resolved. <u>We</u> wanted to resolve it; our board wanted to resolve it. They wanted to get it done and behind them. There were one hundred plaintiffs' attorneys, because the plaintiffs' attorneys went from the United States out to India and signed people up on street corners out there. The government of India retained its own attorneys, a law firm in Minneapolis.

So there were one hundred attorneys, plus the government of India. The government of India, within a month or so of the release—by decree, and then finally by act of parliament—the government of India saw all those American lawyers running around and thought that was chaotic, so the government appointed themselves, the government, the sole representative of the people of Bhopal and the sole remedy. They wanted to take all the other lawyering out. Now, in N.Y. federal district court, we had the government of India. The judge finally got all the plaintiffs' attorneys to appoint a committee of three who would represent the one hundred.

They were very, very close to a settlement—a negotiated settlement. Somebody—we think maybe it was the lawyers for the government of India—leaked the settlement to *The New York Times*. The New York Times printed it up on a Sunday morning. It really blew the settlement out of the water. It gave all the opponents a chance to get in and muck it up before the final terms had been agreed to and worked out. That sent them back to square one. Poor Warren, he said to me and another guy, "You guys run the corporation. You run the corporation. I'm going to do everything I can to get this settled before I retire."

It turned out it was so political that it was not possible to settle until such time as the Indian government wanted to settle. We had retained a number of consultants to help us. We were even thinking of trying to appoint an international tribunal of well-respected world leaders who would sit as a panel. With the agreement of the Indian government and ourselves, they would do some fact-finding, and they would recommend a settlement. I went to London to visit Lord Callahan, a former prime minister of the UK, a Labor Party guy, because he was a guy who we thought might be a member of this tribunal. I went to sound him out on it and get his advice. He was well thought of in India. He had been an ambassador to India during his career.

He gave me some great advice. We talked for a couple of hours. He said, "Look, two points I would make to you. The Indian government knows that you are not unreasonable people. Your chairman flew to India at great personal risk to himself immediately after the tragedy, and exposed himself, and tried to do the right thing with great honor to himself and with great honor to your corporation. He was rebuffed. You have been trying all these different routes. You've gone through the embassies; you've gone through other routes." Rajiv Ghandi was prime minister in India. "You've got all kinds of feelers out. You've been willing to meet with anybody, anywhere, to try to resolve this issue." He said, "It will not be resolved until the Indian government believes that the moment is right. It is so politicized that it just won't happen. You had money on the table. You had a lot of money on the table. They know that any time they want to step up and take the money, it'll happen. You can't make it happen."

"My other advice to you is, do not try artificially to make it happen. Do not listen to people who come to you and say, 'If you'll only spend some money on public relations in India;' or, 'If you'll only, you know, do this or do that;' or, 'I know somebody who knows somebody

who's right next to Rajiv.' If it doesn't come through official cycles—if it doesn't come through somebody in government—don't get involved. Do not monkey with the internal politics of India. You'll just get creamed." That was sort of what our inclination was anyway. We couldn't have had better advice.

We went back, and we just waited. Now, this is four years after the gas emission. During that time, we'd tried through third parties to set up aid stations. We gave a lot of money to the International Red Cross. The Indian Red Cross wouldn't take it, so the money sat in Switzerland. Arizona State University came to us and said they had an idea for setting up a rehabilitation center to rehab people, and to retrain people and get them back to work, whether they were victims or just people of Bhopal. We financed that. Then, the government of India found out that our money was behind it. They came in literally with bulldozers and took it out.

We were really frustrated. Then in December of 1988, I got a call from an American who had just been on an official kind of a business trip to India. He had met with three ministers of the government, and finally with the prime minister himself. They called him in, and they said, "Do you know this fellow, Kennedy?" He said, "Yes, I know him." They said, "Would you be willing to carry a message to him?" He said, "Sure." "The message is, 'If they're still willing to settle for the amount of money that was on the table in 1986'—or 1985—'and add a little interest because now it's 1988, we think we can get the Supreme Court to order the settlement. The Supreme Court will take the hot seat. It will not be the government; it will be the Supreme Court, which is highly respected, that will order the government and Union Carbide to make this settlement." There had never been any hearings in court—never were—and there haven't been yet. But a panel of the court would just take this on and order a settlement for the relief of victims.

This guy came back from his trip in November of 1988. He called me, and I said, "Sure." He got word back, and by golly, three months later, February of 1989, it was settled. It was independent of me; it was independent of Warren Anderson. It was just a question of when the government felt they could take the political heat. That quashed all civil action.

Since the government had already made itself the official representative of the people and the remedy for the people, we paid the check to the government. The government was then going to take and distribute the funds. They haven't really done that. They have given out to the people no more than what would amount to the interest earned on the four hundred seventy million-dollar settlement. The corruption is so bad. That's a long answer to your question.

TRAYNHAM: A very interesting answer. The Bhopal tragedy had a profound impact on Union Carbide. However, I believe it also affected the entire chemical industry, in making them more attentive to environmental concerns, perhaps.

KENNEDY: It absolutely did.

TRAYNHAM: You were involved in that extension.

KENNEDY: That was the realization that the unthinkable could happen, and it could happen anywhere. Well, at that time I was Union Carbide's representative to CMA [Chemical Manufacturers Association]. As president of the corporation, I was Union Carbide's representative to the board of directors of the CMA, which embraces 40 percent of the country who makes chemicals. The leaders of the board at that time—George [J.] Sella of [American] Cyanamid; and Ed [Edwin C.] Holmer, I think, of Exxon; and Bob [Robert A.] Roland, who was the full-time executive president—they came up here to this building within a week or so after. Well, it was a week or so after Warren had gotten back from his trip to India. Warren asked me to sit in on the discussion. They all had known Warren a long time, and they were good friends. They said, "Warren, what can we do to help? Everybody just feels terrible about this. We need to know where you are and what you're doing, and what we can do to help, because it hits the whole goddamn chemical industry. What happened to you could have happened to any one of us."

Warren had gotten calls from his friends among the major European chemical producers in Germany and in England, with the same kind of expressions of sympathy and offer to help. There wasn't a hell of a lot they could do. They did ask Warren to come down to a regularly-scheduled meeting of the board of CMA the following month, in January. They asked Warren if he would come to that meeting and get up and speak to the entire group—this was about forty-five CEOs—about Bhopal, about what he knew about it, what his expectations were, and so forth. Warren did that. I was there. It must have been a horrendous experience for him—but he was the kind of a man who was always great on his feet, and he was very good extemporaneously. He was a very natural person—big, tall, athletic guy. He'd been the captain of the football team in college, and all that, a soft-spoken man; a man of some humor, gentle humor.

At that same meeting, the working committees of the Chemical Manufacturers Association said, "We've got to come up with a response—a proactive response." The most obvious area was that of community awareness and emergency response. "What do you do in the face of such a tragedy? What do you do even before the potential for such a tragedy? What do you do to make the neighbors around a chemical plant aware of what's going on, and what you're doing every day to insure their safety and to control emissions—just normal fugitive emissions or whatever, or spills?" So the industry immediately adopted and set in place a committee to flesh out what was called a CAER program: Community Awareness Emergency Response.

That went like lightning. There was a bill of particulars: a set of management practices that should be put in place; that around every plant in the country you should set up some kind of a liaison, a formal working relationship, with first responders. They should be trained alongside of your own people. You should get into anticipatory programs in communities. We could no longer take the view that everything going on inside our gates was our business and

nobody else's business. We addressed the whole argument about proprietary information: "You can't tell the neighbors because they might tell your competitors. Let's get down to it, guys."

The program was an instant success, so much so that the United Nations Environmental Protection [UNEP] people, hearing about it, asked if they couldn't take it and replicate it. We even seconded a retiring American chemical executive to go to the UNEP headquarters in Paris and work on this for a couple of years. It went around the world.

In the meantime in 1985, the year after Bhopal, the Canadian chemical industry—CCPA, Canadian Chemical Producers Association—went even further than CAER. They fashioned a six- or eight-point program of what they called Responsible Care. That was going to deal not only with community awareness, but it was going to deal with emission reduction, product stewardship from cradle to grave, and transportation of products. They got going with a pretty good head of steam up in Canada, and it looked pretty good. I had heard about it from our Canadian president and CEO, who was quite active in establishment of this thing. By that time, I was part of a committee—I sub-chaired a committee, I guess—that Paul [F.] Oreffice at Dow headed on the board: Committee on Public Perception. "What are we going to do, post-Bhopal, to deal with this public perception issue? PR won't do it. We've got to do some substantial things."

My committee was looking around for what to do. We glommed onto this Canadian program and brought the Canadians down. We met with them right here in this conference room and spent a half a day going over their program. Their program had a lot of substance to it. It had a set of ten principles of Responsible Care that you would agree to, that you would sign on to as a company. It developed, then, six management practice codes that really dealt with everything you did with chemicals, from the developmental laboratory to their ultimate disposal by the final consumer. It included a version of self-assessment, which is now going into third-party auditing today.

As part of my committee responsibility, I introduced this into CMA. At the time, in a most curious way, I was going through the chairs of CMA. I had a dual responsibility. I'd gotten onto this Responsible Care thing through discussion with the Canadians. Then, I was also going through the chairs of CMA. Along with a lot of others, I had a great opportunity to see that it got put in. There was a long period of education. In talking to all of the membership, we felt that in order to be effective, we had to make sign-on to Responsible Care initiative a condition of membership in the Chemical Manufacturers Association. If you were going to be a member, you had to sign on to this. You had to then validate and report on your practices on an annual basis.

Gosh, it's taken hold in a remarkable way. It's now expanded to thirty-six countries around the world—thirty-six was the last count I had—that have adopted Responsible Care. It has done a great deal. At first there were a lot of skeptics, as you can imagine. There still are, but it's done an enormous amount to stop the increasingly negative ratings in public opinion polls of the chemical industry. In working with government agencies and so forth, it's started us back up again. They see that we're actually doing something that's worthwhile. That's been a

<u>tremendous positive</u> out of this whole Bhopal thing. Bhopal and Seveso and the Rhine River and the Exxon *Valdez* and all of those things, they got such a high profile.

Industry performance is better. If you look at the reports, the official reports on SARA Title III, TRI, everybody has to report annually on their emissions. Those numbers are going down and down and down. Since 1985, since I became president of Carbide, I set up a system whereby I wanted a report on every emission and spill that we had anywhere in the world. I wanted a report in twenty-four hours if it was anything that would get us into the public domain or local press, or a serious accident or a fatality or a fire. When we started tracking those, how many calls, and how many emissions and spills—

[END OF TAPE, SIDE 3]

KENNEDY: I don't know whether to be more worried that it was a spill or whether somebody got injured. I mean, it's going to be one or the other. What the hell do I look for when I pick up the phone?

TRAYNHAM: You didn't consider an unlisted number, then.

KENNEDY: No. Well, I have an unlisted number, but all of our people had mine. I told them to call me, because I figured it would get people's attention. If they've got to call the president of the company and say, "We've just had a chlorine leak or an ammonia leak in Charleston, West Virginia, and there's a little cloud. It's not a big cloud, but it's a little cloud that's floating out over the plant"—boy, I'll tell you, it got their attention. It got my attention.

TRAYNHAM: Well, this remarkable career you had led, in 1995, to your receiving the Society of Chemical Industry medal. Tell me something about your reaction to that event.

KENNEDY: Well, it's an incredible honor. I'd been going to those dinners for fifteen years at the Plaza, where those awards are made—the black-tie dinners. I think this is a very serious award. I so respect the people who had been honored before and after me. I was just overwhelmed with the whole thing. I was just very grateful. The industry's been very kind to me.

I started to say earlier that about the time we were getting into Responsible Care, I was working through the chairs of the Chemical Manufacturers Association. That's a four-year rotation. You start out as chairman of the finance committee. Then you become vice chairman of the executive committee, and then chairman of the executive committee, and then finally chairman.

I got a call. This was about six months after Bhopal, when I'd been named president of Carbide. I had already been sitting on the CMA board. I got a call from the president of CMA. He said, "Bob, the nominating committee wants to put your name in as chairman of the finance committee. That will start you through the chairs. I'm calling because it's kind of a four-year commitment, and I'm calling to ask if you would be willing to do that." I said, "Wait a minute now." This is May or June—no, it was May, before the annual meeting—May of 1985. "You're calling to see if the president of the Bhopal company would go through the chairs, and I would wind up being a spokesperson for the chemical industry?" He said, "That's right." I said, "Are you quite sure that's what you want to do?" He said, "That's what we want to do." I said, "Well, I've got to talk to my bosses. You know, for all I know, they may be transferring me into someplace else or firing me. I think I'll talk to them."

I went to talk to Warren, and Alec Flamm, who was our vice chairman at the time. I said, "I can't <u>believe</u> this. These guys want <u>me</u> to go through the chairs. That is profound. It's the greatest thing that could happen to Union Carbide, that they would be willing to take a risk like that with us. If you guys don't object, I think I'd like to do that. I think I ought to do that." I still can't get over that to this day, Jim. In doing that, that's what put me in the time and place and position that I would be honored by this Chemical Industry Award. It's <u>incredible</u>.

TRAYNHAM: Well, during your career, you have expressed your interest in management affairs outside the company by being involved in several education boards. What first prompted you to undertake that kind of off-site responsibility?

KENNEDY: Well, I've always been interested in education. I was on the board of the International School in Geneva when we were there for six years.

TRAYNHAM: Were your children in the school then?

KENNEDY: Yes, our kids were in the school. I got on the board of governors. It's a very international school. They had sixty-five different nationalities in that school. Then I came back, and I got involved in the board of trustees of the boarding school that I went to in New England.

Then, I got involved when President [George H. W.] Bush convened the governors in Charlottesville in 1989 and said that he wanted to be the education president. He wanted to come out with a program that ultimately was called Goals 2000 to make American public education tops. He challenged the Business Roundtable, which is about two hundred CEOs, and asked them what they were prepared to do to help in his Goals 2000. I joined the Roundtable education committee. John Akers of IBM headed it at the time. I joined that committee.

We went to see the president at the White House the day before the conference of the governors that he was going to attend in Charlottesville. We said, "Mr. President, if you and the governors will set a goal that America will be tops in public education by the year 2000, and if you'll set up some mechanism for knowing that we got there—by what standard would you say that we are at the top of the ladder—and then education is a state-by-state deal, administered by the states—then we will undertake to work and set up a business coalition in every state in the country. We will work with the governors and their chosen aides to forge a business-education coalition for systemic school reform."

The governors did largely what Bush asked. Then the Clinton Administration reaffirmed it pretty much. They changed the names a little bit. We set about doing our part. I came back, and I initiated a Connecticut Business-Education Coalition. I had about thirty-five CEOs who convened in Connecticut. This was in 1990. We are addressing ourselves to reform of public education statewide—systemic reform. We're going to deal with early childhood, setting high standards for all kids in all schools, teacher development and staff development work, introduction of technology, and introduction of a better system of accountability. If schools are failing, let's figure out a way to get rid of whoever is administering those and take them over. We can't let schools fail.

We had a pretty good thing going in Connecticut, and Lowell Weicker was governor then. He took up the cause and gave his entire State of the State message, in about 1992, to education reform. The legislature then set up a blue-ribbon commission to advise and to come up with, really, a bill on comprehensive reform. They packed the commission with eleven business guys—eleven guys from our coalition. I was one of them. A business guy was cochair, a guy who just retired from ABB Surface Combustion Coalition.

That was my involvement. I'm still kind of involved. Since I'm retired, I teach. I guest professor at business schools. I do a week every semester up at the Cornell Business School. I do five days of seminar sessions, a couple times a day, with graduate students in business. I'm doing one next week at the University of Massachusetts. I just have fun with it.

I talk about everything. I talk about Bhopal; I talk about crisis management; I talk about integrity. I'll tell you, when you have a gas release or a major explosion and people are killed, and you start looking at how to pick yourself up, you realize that the only thing you ever had going for you to begin with was reputation. When that's down the drain, the only way you get it back is one day at a time. That's the hard way to learn that lesson.

TRAYNHAM: I just want to ask one more question, if I may.

KENNEDY: Yes, sir.

TRAYNHAM: You've been so busy with Union Carbide affairs, it's remarkable that you had time for family affairs. But according to your biographical information, you do have a family. Can you tell me briefly about that.

KENNEDY: Yes. We have four kids. Sally and I just celebrated our forty-first wedding anniversary. The kids are all grown up, of course. Our baby is twenty-six; she's going to be married in May. They're all relatively normal and straight and doing good. We have four grandchildren—four little girls, granddaughters.

TRAYNHAM: Are any of your children in the chemical industry world?

KENNEDY: No. The two boys were not technical. They're both in business—in marketing and sales. Our older daughter is in social work; very much. She is running a family group center down in Maryland to help single parents not only take care of children, but get them educated enough to go in the work force. It's a state agency that she runs. Our youngest, who's about to be married, is in graduate school to get a master's degree in special education down in Virginia. She'll be back into teaching and special ed.

TRAYNHAM: Thank you for being so generous with your time. I know you have an appointment. It's been very good talking with you.

KENNEDY: Thank you a lot, Jim.

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[END OF INTERVIEW]

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