

Ralph Shrader Oral History

COMPUTERWORLD HONORS PROGRAM INTERNATIONAL ARCHIVES

Transcript of a Video History Interview with Ralph Shrader, Ph.D.
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TABLE OF CONTENTS

- **Early Years and Chicken Rituals**
- **Twelve Schools in Twelve Years**
- **Growing up in Post War Miami**
- **Conquering Cursive**
- **A Sports Legacy**
- **Inspirational Educators**
- **'Breaking' into the Ivy Leagues**
- **A Southerner Goes North**
- **Exploring Diversity at Penn State**
- **The Frustrating Fundamentals of Physics**
- **Problem Solving: A Career Solution**

- **Working for Greyhound**
 - **Pursuing Big Time Football & a Ph.D. on the Plains**
 - **Budding Romance & Bright Lights at Xerox**
 - **Early Voice Recognition at IBM**
 - **WESTAR & Western Union**
 - **Joining Booz Allen**
 - **Revolutionizing Government Technologies**
 - **Breaking up Ma Bell**
 - **Advancing IT at Booz Allen**
 - **What to Be; What Not to Be**
 - **Finding a Few Good People**
 - **Surfing Against the Dot Com Wave**
 - **September 11, 2001**
 - **Honor, Character and the Changing Role of IT**
 - **A Legacy of Inspiration**
-

Early Years and Chicken Rituals

DSM: Dr. Shrader let's begin at the beginning with your name, when you were born and talk about your parents.

RS: My name is Ralph Shrader. I was born in Miami, Florida on September 20th, 1944. My mother was from a town called Wabasso, Florida. My dad was from Chattanooga, Tennessee, however he grew up in the south Florida area, Del Ray Beach.

Eventually, both my mother and father lived in the Miami area. My father was in the Navy, and my mother's family was primarily from North Carolina. There was a very deeply embedded southern component in my early life.

DSM: When you were born in September of 1944, Hitler, Stalin, Churchill and Roosevelt were still walking the earth and your dad was in the Navy. Was he career Navy?

RS: My father was in the Navy as part of World War II. In the period after the War he left the Navy but was still in the reserves. He worked in Miami, in the county tax assessors' office, and part of his responsibilities was to go around from place to place and do tax assessment work.

He was also a photographer. In fact his Navy career was built around photography. While in the Navy he took pictures and developed pictures and ran photo labs, things like that. When he was not in the Navy he also worked as a photographer for one of the large department stores in Miami. A store by the name of Burdines, which is still there today. He did a lot of their advertising photocopy and things like that. In fact I had the privilege of being a child model in the early part of my career. We still have some photographs of me taken modeling various children's outfits, pictures that my father had taken of me to be in the advertising copy. So I was a child star, if you count advertisements in the local newspaper.

DSM: So your first memories of your dad are not as a sailor but as a photographer.

RS: That's right. In my early days my recollections of him were as a civilian. I remember the Navy only as his reserve obligations, which demanded he would have to be away for the weekends doing his reserve training. At that time Miami had quite a military presence, and I remember his photography was primarily in the aerial photography domain. So he would go up in airplanes and take pictures of various things on the ground.

We look at surveillance today and think how sophisticated it is, but in those days it was people going up in planes and taking pictures with Speed Graphic cameras, and that was what he did. So I remember that part of the Navy, but from the point of view of what he did every day, I remember him as a photographer working for the department store. Later on I remember him as a member of the tax assessor's office, going around and determining what the tax bills were going to be for the local citizenry.

DSM: Were your grandparents still alive? Did you know them?

RS: They were still alive. My grandparents on my mother's side were somewhat of a major influence in my life. My grandmother lived until well into her 90's, so she was with us until the 1990's and she was a large part of my life. In fact during some of the early days when my parents were still struggling to raise a family, I spent a considerable amount of time with my grandparents during the day. It was what would be constituted as day care today.

They were a North Carolina family that had migrated south to Miami back in the 1930's. My grandfather, my mother's father, his name was William Madison Matthews. He was a carpenter by trade, and a ship's carpenter by very specificity of trade. He worked in a boatyard in Miami called Merrill Stevens helping mainly to rebuild boats. Merrill Stevens was a place where they brought boats back to be refitted and he did carpentry work on that.

He was a true North Carolinian in that he built his own house down in Miami. He built it in an area that then was a little bit rural, which today is in the very heart of town. He had two lots. He built a house on one with a garage and an apartment above it. The other lot next door is where he had his own garden. So as we grew up I remember my grandfather's garden. I always knew that the food and vegetables always came out of the garden. You didn't go to the store for it. He also had a chicken yard. He raised his own chickens so he had fresh eggs and periodically he had fresh chicken.

DSM: Right there in the middle of downtown?

RS: It was 19th Avenue and 19th Street, which is in the heart of Miami today. It's between downtown and the airport so you get an idea of how much in the middle it was. One of the rituals I remember was that Sundays with my grandparents was always chicken day. And we alternated, we had fried chicken every other Sunday and we had chicken and dumplings on the intervening Sunday. So it was very much of a chicken ritual on Sundays.

Twelve Schools in Twelve Years

DSM: That's very North Carolinian. I know of what you speak. Describe growing up in Miami just after the war. It must have been so different from today.

RS: Well it was quite a bit different. I remember being in Miami as a very young child and we had our own house out in the area of Coral Gables. I had a sister who was born in 1949; she is 5 years younger than I am. Living in the Coral Gables area meant we were a little bit isolated. At that time it seemed it was a long way off from the heart of town. My mother's sister and her family lived a block away, so we had relatives there, we had friends.

During first and second grade I went to school in that area, South Miami. After that my father returned to active duty in the military full time by choice. That would have been in the early 1950's that he went back into the service, because I was in third grade. I was 8 or 9 years of age and that would have been 1952, 1953. So his decision to go back into active duty military began a jaunt for me that put me into 12 different schools in the twelve years of my primary and secondary education. I saw a lot of schools during that particular time as we moved from place to place.

DSM: Did you go to schools in the mostly southern United States, or all over the world?

RS: Almost all the schools were in the south, and with the exception of 3 years in the Norfolk, Virginia Beach area, all were in the state of Florida. The first and second grades were in Coral Gables. The third and fourth grades were in the North Miami area. The fifth grade was in both Jacksonville and then back in Miami. I remember that because the family returned to Miami from Jacksonville because my father's aerial photography work was always was either attached to a photo lab where he processed the film, or he was actually taking the pictures from a deployed aircraft carrier. His tours of sea duty were on aircraft carriers, and in those days you would have 6 to 9 month deployments all primarily to the Mediterranean. So given the fact that we were looking at a 6 to 9 month period of time without my father being at home, my mother decided that rather than staying in Jacksonville where we had not really put down any roots, we would go back to Miami where we had friends and family.

My sixth grade years were in a small town just north of Orlando called Sanford, Florida, where there was a big naval air station. After that we went to the Norfolk, Virginia Beach area and spent 3 years up there. It was circumstantial, but while we lived in that area, they were really struggling to get the school system right. In Sanford, Florida, the school only went through the sixth grade, so I was in the highest grade in that particular school. Then in seventh grade up in the Virginia Beach area, the school didn't have a formal junior high structure and they were struggling with where to put the students so they decided to add a seventh grade to a school. So in my school, the seventh grade was the highest grade. The next year they solved the problem a different way by sending us to a different school where the eighth grade was the highest grade. Then finally when I reached the ninth grade they put us in a different school where again, I was in the highest grade in the school.

So we went through his succession of schools and grades, different school each year and yet we did have somewhat the same classmates. Come tenth grade our family moved back to Pensacola, Florida, where there was a big naval station. Then eleventh and twelfth grades were in the Jacksonville, Florida area. Still today, Jacksonville feels more like home than anything else. My parents continued to move around after I left for college; they spent more time up in the Norfolk, Virginia area, more time back in Pensacola, Florida but my father's last tour of duty was in Jacksonville and they settled back in that area and have been there ever since. My father passed away last December, right before Christmas. My mother still lives today in a little area called Orange Park, which is just south of Jacksonville. So Jacksonville has sort of become the point of presence in Florida as my grandparents passed away and the interest in Miami waned.

Growing up in Post War Miami

You originally asked about Miami, and my recollections from that era to today are very dramatically different. Without attempting to be offensive or related in any way to the different ethnic groups, I can recall with fascination, going downtown in Miami with my grandmother and my mother, and our treat was to go to the local five-and-dime and eat at the lunch counter. I also remember that in windows there were signs periodically saying, "Habla Espanol," indicating that somebody in that store was able to speak Spanish.

We've obviously seen a great shift in the population center in Miami. There are a great many more people of Hispanic heritage there today, and it's almost more common to see a sign there today that says, "We speak English," because I think we've seen the shift go from one area to another.

We've also experienced a lot of tensions there because of the influx of all the different nationalities with different perspectives and different points of view. I think it has created both a melting pot, which is good, but also something of a tension filled area because the clash of cultures is not an easy thing for people to transition through. Miami is a vastly different place today. It's obviously a much bigger place. My childhood recollection of it is as sort of being a small "user friendly" place. When I go to Miami today on business, it's a very complex, far-flung, hustle bustle, quite a different environment today.

Conquering Cursive

DSM: One of the questions I like to ask is about early signs of things to come. Are there tales that your parents or grandparents tell that give some hint of what you might be doing later in life?

RS: I don't know. I'm not sure there was definition early on, in fact I've often thought back to what were the defining moments.

DSM: Did you learn to read early?

RS: Actually I don't think I did. I remember something that was the opposite. I remember how difficult it was to learn to write, and the reason it was difficult was because of this changing of schools. I went to a school where they didn't teach what is known as cursive writing until the third grade or something like that. Then I transitioned the next year to a school where they had been taught it the year before. So I suddenly was in a classroom with a group of children that were already trained in how to do this, and I didn't know how to do it. So my initial recollections of how to do cursive writing was to actually print the letter then draw a little line between it and the next letter. It worked. It was pure innovation built of necessity because I didn't really know what I was doing. I don't know if that relates directly to the fact that my handwriting has always been somewhat small, and I think that was some attempt to hide that. So I don't have any dramatic stories of learning how to do things early. I do have recollections of trying to do things hard that presented real challenges for me.

A Sports Legacy

DSM: You started High School about 1959, 1960?

RS: I graduated in 1962, so a three-year cycle would have put me in about 1959.

DSM: Is that where you discovered football?

RS: No, I've always had a passion for sports. That is one thing that's been with me all of my life. In fact when my sister was born in 1949, I was 5 years old and I remember my grandfather and I were at a baseball game. In addition to being a carpenter with great skills, my grandfather was also an inveterate baseball fan. He absolutely loved the game and he transferred that love to me. Miami at that time was simply minor league baseball. We didn't have the far-flung major leagues that we have today so my grandfather and I used to go to baseball games all the time. It was a very inexpensive pastime. You could go and sit in the bleachers for a nickel or a dime. We would go and watch baseball games and my grandfather also always wore a baseball cap. That was his work uniform. He would get up in the morning, get dressed and put on a baseball cap.

DSM: What team?

RS: Well, it wasn't a team at that point in time. It wasn't like today where we have all the logos. It was simply a cap without any kind of logo on it, and I grew up wearing a baseball cap too because my grandfather wore a cap. The only thing you had a choice of was simply a color. So I remember switching from blue caps to green caps and things like that and I grew up wearing baseball caps.

I don't know why this is such a vivid memory but I remember that we were sitting in the bleachers of a Class 'D' league minor league game. The 'Miami Sun Sox' were playing baseball and my father came up behind us, tapped us and said, "You have a little sister." That was how I got the word I had a sister. I don't imagine that was too big a deal in my life at that point in time. I don't suppose that a five year old thinks that much about a new sister coming into the family, but I remember where I was.

DSM: Were there coaches, early teachers that you remember that made a difference?

RS: It was only later on I think, that sports began to take on the focus of the coaches. I grew up in an era of unstructured athletics as opposed to the big time leagues and teams that required a lot of resources. It was more like sandlot ball. You just went out and played everyday at school, and after school you played ball and everyone was in it. It wasn't until later on that the coaches came in, although some of those I remember.

Chronologically, I remember my sixth grade year in this little town of Sanford. It was unique for lots of reasons. We had just moved to Sanford again; you know another move, another transfer, another base location. We had moved to town in the summertime. My family tried to make transitions in the summer so it wouldn't interrupt the school year, and I remember getting a postcard from the local school telling me what my school assignment was going to be, what classroom I was going to be in, where and when to report. It was a postcard, the worst written post card I had ever seen. It was virtually unintelligible. You could not read the handwriting, which seemed to be almost a series of diagonal lines with only some modest circular motions that you were trying to read. It at least conveyed a time and place and had a signature on it, which we interpreted as 'Mrs. Jones.'

So I remember heading off to school in search of Mrs. Jones. Then come to find out it really was a Mr. Jones. That was my first experience with a male teacher. Until that time all of my elementary school teachers were women. So this was my first encounter with a male teacher who indeed, was a rather large man and rather athletically inclined himself. It also turned out much to my delight, that this small school, the elementary school for the whole town of Sanford, was very athletically oriented. We had a season's worth of football competitions and basketball competitions and softball competitions, and all those things that that came down the pike for us.

One of my early memories was that we had four, sixth grade classrooms, and they had a tournament each year where we actually went to the local stadium. It was not a big place. It housed the local minor league baseball team, but they allowed us to play our football tournament under the lights in this stadium. It was touch football, but it was still very, very dramatic for a group of kids. I remember being so nervous about it that I actually made myself sick. I had a stomachache and nausea and everything else because I got so excited about the championship.

DSM: What position did you play?

RS: I was the guy who threw the passes. I wasn't that good at it so later on I moved to the side where you actually caught the passes. I learned at that point in time that I enjoyed being in the spotlight; enjoyed being out in the center of things. I also learned that I had a real nervous streak that I was going to have to take care of. It came back later to haunt me and play a role. I always had to moderate my emotions as I went through whatever endeavor I was involved in.

My interest in sports has always been there and in particular during the years in Virginia. I focused pretty heavily on football and baseball. Baseball was more of a natural sport for me than football. I was big for my age. I was able to do things that others weren't able to do and during my years in Virginia, I had a very good tenure in baseball. There was a very strong interest in baseball in that area. It was during a time when supervised athletics was coming into play.

As I mentioned before I lived on a naval base there, the Little Creek amphibious base. The Captain was very interested in children's programs and he got the Navy Seabees together and built a baseball stadium for the little league. This is something only the military can do. He said, "We want a stadium for the kids," and he deployed the troops and they built us a stadium complete with press box and refreshment stand and everything else. So we had the benefit of that and we played very competitively. We were able to play in regional tournaments and had a great time, learned a lot and had a lot of fun.

I didn't play structured football until I got into ninth grade when I was afforded the opportunity to play freshman football against some other ninth grade teams in the area. That's another experience that I remember because the ninth grade football coach was one of these very tough individuals who had a propensity to do a lot of yelling. It was not a friendly experience. He was a tough guy, but I for one learned to respect that. I don't know whether it's the Bobby Knight theory of coaching or what it was that he had. He did a lot of yelling, a lot of hard, hard driving but I found that to be something that I could respond to. I learned to play for him, and enjoyed playing for him actually. It was an experience that worked out well. He was one of the coaches that I still remember as being someone who was trying to make us into better athletes. He coached the football team in the fall, which was my first exposure to him, and then later on he coached the baseball team. So I got to come back and we had already built our relationship. We had a mutual sort of trust and understanding. So I think I was given opportunities in baseball that probably helped me move things much quicker to improving myself as an athlete and didn't have to go out and re-prove myself on the baseball diamond. That was the beginning of an intensive period.

DSM: Were there personal friends or rivals from this period of time that you remember that made a difference?

RS: Actually one of my most unusual recollections along those lines is somewhat related but not directly. I mentioned when I was in my early years, in first and second grades in Coral Gables, I lived in an area close to where my cousins lived, my mother's sister and her family. I remember a group of kids I used to play with there. One of them was a chap named Bruce Fisher. I also remember being in the second grade in South Miami High School and sitting next to a little girl who was a schoolmate of mine who had a very unusual name. Her name was Timmy Dutcher and these are the kinds of names that stick in your head.

When we went to Jacksonville for my eleventh grade year and I got into Lee High School and started playing football, this was big time athletics. Lee High School was a very big football school and we played four games a year against teams from Miami. Now Miami and Jacksonville were 365 miles apart. So the drill was, two times a year we got on the train and we rode to Miami and we played in the Orange Bowl against Miami teams. Then two times a year the other two teams would come up. So there were four schools and each year you sort of alternated the patterns of how those schools would go back and forth. We played all of our home football games in the Gator Bowl. So this was big time athletics. It was a big thrill. I remember back to my Sanford days in sixth grade, and now here we are in the Orange Bowl or the Gator Bowl playing games.

When I was in the twelfth grade we had a team that was fortunate enough to compete for the state championship. We went down to Miami to play Coral Gables High School. I remember getting advance notice of who the star quarterback was for Coral Gables High School. It was none other than my former neighbor Bruce Fisher who was now going to quarterback the game against us.

This was in an era when you didn't have sophisticated scouting techniques. They gave us programs so you could scan the roster for the other team and that's how I knew who he was. Again, as I was thumbing through the program I came upon the cheerleading squad from Coral Gables High School, and the head cheerleader was none other than my second grade classmate, Timmy Dutcher. So I go off in my senior year of high school to play football against my former neighbor and a cheerleading squad that's headed up by my former seatmate in the second grade. It was fascinating to come back full circle and be back there. The important thing to understand though is that we won the game. We won the state championship. We actually prevailed in the end, so I felt good about it.

DSM: Tell me about the game. What was the score?

RS: The final score was 19 to 12. We actually were ahead all the way and kept the game under control.

Inspirational Educators

DSM: Well, you obviously got pretty good at football because I gather that Duke offered you a football scholarship.

RS: Yes, I had that privilege, but before I get into that I would like to return to one theme, and that's about teachers. There have been a couple of teachers that had a major impact on me.

I mentioned to you that I went to a newly created eighth grade where they had actually appended seventh and eighth grades and we were sort of the newcomers there. This was in the Virginia Beach area. I had a wonderful teacher that year, a woman by the name of Angela Wyche. I always remember her describing how to pronounce her name; it's like 'white church' only you stop, you just go 'white-ch' and stop. She was a delightful lady, very focused and a very, very good teacher. Someone who I thought was very motivational. She was the first person who really forced me to sort of wrestle with some of my own future thoughts. She challenged me saying, "What are you going to do? You're in the eighth grade now and you're going to be going to high school, but beyond that there's a career. And what are you going to do with your life?" She was very supportive in saying, "You have a lot of gifts. You have some intellect. You have some talent but how are you going to apply that? What are you going to do?"

And I remember at that time my focus was more on a military career. I think that was probably attached to the fact that my father was a Navy Chief. So we're talking about an enlisted man, not in the Officer Corps or anything like that but I was exposed to a lot of this particularly during the three years we lived in Virginia. We lived on base and I had exposure to most of the people, the base Captain, and people like this through Boy Scouts and baseball. I got to meet a lot of people and a lot of my friends had fathers who were highly ranking military people. So I thought it would be a neat touch to go to a military academy, and my favorite would have been the naval academy. Like everybody else at that age you want to fly airplanes.

Unfortunately it was also in the eighth grade when I found out that I was nearsighted. So my vision was not perfect, and of course in that era you were disqualified from a lot of the opportunities there. So I was then forced to think about whether I really wanted to go to a military academy or do something else. And I remember Mrs. Wyche encouraging me to focus on the math and science areas. She thought that maybe that would lead me to engineering and similar things because they were pragmatic applications of math and science. I couldn't really tell you what an engineer was. I came to realize it wasn't the guys who drove the trains, but beyond that I wasn't really certain what an engineer did. I was told that math and science were strong aspects of that and that I might have some proficiencies in that. So she helped to steer me and shape me, and I would say she was an absolutely good shepherd. She did not give me favored treatment, but she made sure I was always operating at my best. She was very demanding, but she became a good friend of the family. In fact when I was married in 1969, which has to be almost 12 years after that, she came to our wedding. We got to renew acquaintances, see each other, and we maintained touch all through that time. So she was a very strong, early influence in my life. She's a teacher that I remembered and a teacher that remained very special to me really long after the school years were over.

Another of my recollections and strong influences on me was my eleventh grade English teacher, a woman by the name of Sue Goethe. I had just come to this school in Jacksonville, "Robert E. Lee Senior High School," a good southern name. We moved to Jacksonville during the summer time, and I had been fortunate enough to start practicing with the football team before the school year started. So I knew some folks, I had some familiarity.

When I got my schedule of classes I had no context in which to make judgments about teachers, but I recall that when I went into the locker room in the preseason practice and showed people this list and they saw the Goethe name there, they reacted very sympathetically on my behalf. They said things like, "You're in trouble now my friend, because she is one of the hard drivers, the tough nuts that you have to deal with there." So I went into it with great trepidation about what might happen. What I found instead was a woman who was an almost prototypical schoolteacher, from the no makeup to the hair tied up in the bun behind the head. She was the classic old maid schoolteacher, who on the one hand was very tough, very stern, very strict. On the other hand she was very concerned about people learning what it was that she was trying to teach.

The thing that she really impressed on me was the structure of the English language. I remember diagramming sentences, which could have been an ordeal but instead I viewed as a challenge because you had to really figure out what words were in a sentence, where they fit, how they fit together, and then how to string them together. Somehow it appealed to my analytical side as opposed to the more artistic side, and in going through that, and in working with her, and being challenged by her, I felt that in one year I had learned an enormous amount about construction of the language, how the language comes together.

That's a skill that I still apply today in terms of my writing. She challenged us to write creatively and do this and do that, and that's somewhat of an art form. Some days you're on and good stuff flows, and some days you're not and it doesn't flow. But the structure thing stays with you forever, because you can always structure less than exciting prose correctly, and by virtue of getting it right you have an advantage. She did a wonderful job with me in trying to put that together for me in a way that took.

Teaching is an interesting thing. The teacher is teaching to you, and you are a receptor. Sometimes the teacher does a wonderful job, but you don't do a very good job on the receiving side. Somehow or another we meshed. She was doing a good job of teaching, and for her I was doing a good job of receiving. I viewed that as being a very significant thing that has played a large part in my life. It's something I still value today, the things I learned from her. When I look at teachers through my high school era I really put Mrs. Wyche and Ms. Goethe together in that category as being key influencers for different reasons.

“Breaking” into the Ivy Leagues

DSM: You entered college for your undergraduate degree in one of the most interesting periods in American history. You didn't go to Duke. You went to Penn, to Philadelphia in a period in which the civil rights movement was engaged. Vietnam was beginning to heat up. You're a Southerner. You're the son of a sailor, so you have this military background, and you come out of the south into Philadelphia to start an undergraduate career. Tell me what that was like.

RS: For me it's even more interesting how I got there.

DSM: How did you get there?

RS: That was another strange set of circumstances, but following along on the idea that I should be an engineer, that that should be developed in me, I had thought about what were the engineering schools, where should I go, and what would be appropriate. Then my junior year of high school I had made a determination that Duke would be a good place to go. I had never been to Duke, but in Jacksonville at that time there was a propensity of people that I knew that were either going to school in Florida or in North Carolina. Chapel Hill was thought to be more the party school, and Duke was thought to be the serious school. There were other smaller schools but North Carolina was a prime destination, and Duke was considered to be, still is, an excellent academic school. So I had been leaning in that direction and they were also interested in me playing football there. I was interested in that because it wasn't the top echelon of sports and I didn't think I was that good, but it was in an area where I thought I could be competitive and still play.

Yet I had this misfortune. I kept breaking my arm while playing football. I actually broke my left forearm, the ulna to be precise, three times in a space of about a year and a half. The fortunate part was that I always broke it in the same place but it never really healed, and the last time I broke it was summertime before my senior year of high school. My father being in the Navy, I was treated by Navy doctors. I remember distinctly going out to the Navy base and there two Navy captains there. They couldn't have been more different. There was a Captain Reese and a Captain Bickerstaff. Captain Reese was a mild mannered, non-athletically inclined individual. Captain Bickerstaff was the former team physician from the Naval Academy. So he actually had years of treating athletes. I remember going out there, and you didn't always see them together but you got to see them both at times. I remember Captain Reese telling me to just forget about football. It was obvious that this is something I shouldn't pursue. I should just quit. Then I remember Bickerstaff saying, "What the hell. If you want to play, and if you break it again you can come in here and I'll do a bone graft operation and set that thing together so it won't come apart." Obviously I was more inclined to listen to Bickerstaff than I was to Reese so they developed a special brace that I was able to wear on my arm and make it through my senior year.

But I was becoming a bit concerned that I was living on borrowed time. The x-rays of my arm still showed no calcium build-up, no true healing across that gap. So the shadow was still there. I still had an inherent weakness. So I became concerned that I was not going to be able to make it through the rigors of more strenuous college football without hurting myself. That was in my mind but I had already had the opportunity to go to Duke, and scholarship money which was important to me because I couldn't afford to go to school without some kind of help. Now I had a wonderful guidance counselor at high school who sort of watched after me, steered me towards Duke, and was keeping an eye on everything that was going on. And really out of the blue, this was in January of my senior year of high school, she called me into her office one day and said, "The Dean of Men from the University of Pennsylvania is going to be in town and he would like to come out and meet with you and your family to just talk about an Ivy League education."

DSM: You had never thought about it?

RS: I never even given any thought to Penn. They told me it was an Ivy League school and I wasn't even sure what that meant. I knew it was further north than I had ever been. I had never lived north of the Virginia Beach, Norfolk area. I had come up to Washington for one visit. Never been north of Washington D.C. and had only been in the D.C. area for a couple of days worth of vacationing and touring, and I wasn't sure why I should be interested in any of this.

But the fellow came out, met with my family and me, and talked about an Ivy League education and how Penn was in a different class. Mentioned the city of Philadelphia to me; that Franklin Field was there and the Philadelphia Eagles played their home games at Franklin Field. That the Penn relays were there and filled the stadium, and the Phillies were in town with baseball.

Of course he emphasized the school, but he talked about the surroundings, the fact that it would be a totally different experience for me because this would be in the heart of Philadelphia. I thought it was interesting but I didn't know whether it was relevant or not. My biases were all toward going to school in North Carolina. That's where everybody goes.

It was one of those things that fascinated me, and I guess it's one of those things that is an insight into me. I don't necessarily take to new ideas quickly but I don't dismiss them. I tend to let them build inside and become part of my thought process. So this was there, and there was nothing to lose other than the application fee. So the Dean from Penn said, "Why don't you send in an application? We'll see what happens, where it goes," and my guidance counselor was pushing really hard. She was telling me, "Look, if you can go to Penn it's the right step up. It's a whole new experience for you. You should do it."

So I submitted my application, and the university was in a very responsive mode and came back almost immediately to offer me something they call a ‘Benjamin Franklin National Scholarship.’ Basically what it amounted to was a full, free ride. They paid all of my tuition. They paid all of my expenses. I even got spending money, a check each month of my own spending money to go to the school. So I’m there with a nice deal at Duke, but not anywhere near as nice, and then this thing, and I’m being told that Penn’s academics are beyond reproach. So that was a time for me to step up and display a little guts and decide to make a commitment to something that I knew nothing about. So I said, “Okay, I’m going to go for it. I’m going to take the offer. I’m going to go to Penn,” and that was my commitment to Penn. Now I didn’t have to live up to that commitment until it came time to go to school.

A Southerner Goes North

RS: My mother, father, sister and I got in the car and we drove from Jacksonville to Philadelphia. First time I had ever seen it. First time north of Washington D.C. I remember the trip so vividly because as we got closer I got more nervous and began to question, “What have I done here? Why have I done this?” I was about 18 years old at the time and had the chance to drive the family car. We were driving in the city of Baltimore, up Route 1. There was no 95 to deal with at the time. We were driving up Route 1 through the city of Baltimore, and I was getting so nervous at what I considered excessive traffic that I had to pull over and stop and let my father take the wheel. I just couldn’t handle the pressure of the Baltimore traffic. That gives you a little bit of an idea of my mindset, where I come from. The approach to Philadelphia, Route 1 takes you west of the city. So we were coming in through the suburbs and that’s not so bad, but as you make the turn to the university, you make a right turn and go down Market Street. And Market Street takes you right underneath the train tracks and into what appeared to me to be one of the worst slums I had ever seen in my entire life.

DSM: That wasn’t exactly a happy period in Philadelphia.

RS: No it was a very difficult period. I remember driving along with the elevated train and that sort of stuff, and I remember my thinking was, “Ralph you’ve made a huge mistake here.” Any relationship between this and the rolling green campus of the south is totally lost. You’re now caught in the middle of this huge slum, in the middle of some big city in the north where you know nobody and you have no comfort level at all. My parents drove me up there and the dormitories at the University of Pennsylvania were in the old quadrangle, very historic buildings, but they were also old, very old. I got loaded in there and my parents had to leave and go back home and I remember my mother saying that it was the worst feeling she ever had, that is was sort of like leaving her son alone on the side of the street in the heart of Philadelphia. That was my first exposure to Philadelphia, being caught in the middle of this.

Exploring Diversity at Penn State

DSM: Who was your first roommate?

RS: My roommate I knew, and that was typical of the influence my guidance counselor had with the University of Pennsylvania. The chap who graduated as the valedictorian of my high school class, who was an absolutely brilliant individual, won a national science fair award for research he did on cancer, had had his heart set on going to M.I.T. He was accepted at M.I.T., but he didn't get an adequate amount of financial aid. At the last minute our guidance counselor worked her connections at Penn and got him in. So I had the choice, do I take a random roommate, or do I take someone I know. We weren't closely aligned in high school. He wasn't an athlete and I was and so on, but I decided to go with the devil I know versus the devil I don't. He turned out to be a wonderful roommate for the freshman year. He was focused on the right things, and not only that, we made him into an athlete. He became part of our intramural basketball team.

Now the first person I actually met had the room across the hall from me. His name was Steven Rueben. He was interesting for me because first of all, he was Jewish. My high school in Jacksonville had two Jewish kids in the entire school. They were very popular kids. One of them, Fred Shenkman, whose name is very close to mine in the alphabet, he and I were sort of paired together by alphabetical stuff. The other was a young woman by the name of Karen Abraham, who was very popular and head of the senior girl's association. But those were two isolated examples of dealing with a totally different religion that I had no experience with.

I met Steve and it turns out that his father was one of the senior executives at NBC. As poor as I was, was pretty much as rich as he was. Had great wealth, lived out on Long Island and was a New York City kind of guy with all of the background, just a wonderful, engaging chap. We became very close friends and I learned quickly. He was the one who educated me in what it's like to be into the big city world, wonderful influence. He had a roommate who actually came from Florida, who was almost exactly the opposite. He was a slow talking, drawling southerner who just couldn't ever sort of get to the finish of a sentence. But again, just a wonderful guy and there was a whole selection of people that I began to meet.

I quickly learned that one of the great benefits of going to a school like Penn is the diversity. I didn't know this when I went there, but Penn was roughly half Jewish population, half non-Jewish population. They were half prep-school kids, half public school kids. So everywhere you looked there was a mix of people, and even a mix of people from foreign countries. On my floor there was a very engaging chap named Thor Halverson who was a Norwegian. His father had been a long time Norwegian Ambassador to Venezuela. He had developed a huge import, export company in Venezuela called 'Halven,' Halverson-Venezuela, and had great family wealth. So Thor was down at the end of the hall, and Thor's roommate was a chap by the name of Vinny Dole, or Vincent P. Dole the Third, as you may know from the pineapple company.

So there was staggering wealth, and just a whole different world for me. I'm a public school kid from Florida with a Navy Chief for a father and I'm trying to learn this fast track environment. It was a real learning experience just because of the diversity of people that I dealt with, and the diversity of experience. You grow up in that environment and you feel a lot richer for having it.

I know that was a whole different experience than I would have had if I had gone to school in the south or elsewhere, where it would have been a much more homogenous experience. From the beginning I was given the benefit of really seeing a lot of diversity, a lot of different people from different backgrounds, different perspectives and different beliefs, and I felt that that was one of the great parts of the learning experience, just the experience of how I was living. The Penn experience I think got off on a bad foot in terms of driving into campus, but once you got past that and you started to interact with the people, you started to see the richness that was there on the campus. And of course the education was wonderful. Then I got everything else I was looking for. I got the extra time to go see the Philadelphia Eagles and the Phillies and all these kinds of things. I think I had the full experience.

The Frustrating Fundamentals of Physics

DSM: When you started at Penn you knew you wanted to be an engineer. Was there ever any doubt? Did you ever think about doing something else?

RS: My only doubts were when I found it so hard. I tell people today to be prepared when you go to college. When you go to college you have an interesting set of circumstances. When you're in high school and you're at the top of the heap and you're feeling good about yourself. Then you get to college and you find out that you've got the top of everybody else's high school in there with you. So when I went to Penn I found it to be extremely hard. I was a good student in high school but I remember for example, freshman physics. I found it to be a very challenging course, and I remember some of the fundamentals, force equals mass times acceleration, and things like that. Seemed like I could read the book and understand it, but I went in to take the first test in physics and read these problems and I thought they didn't give me enough data. I didn't know how to solve these problems because I didn't have enough data. I had too many unknowns and not enough knowns to plug them into the equations that I knew.

I walked out of there extremely frustrated and sought a new friend. He was a local fellow from Central High School in Philadelphia for Boys. It's one of those academic excellence schools that feeds a lot of students to Penn. Art Simons became a close friend of mine, and again you note the pairing of Sh-Shrader, Si-Simons. Art Simons was paired with me for four years at Penn. We took all the same classes. We were never in a class without one another. He was an interesting chap who was Jewish and lived out on Roosevelt Boulevard in Philadelphia. His father ran a corner grocery store and they lived up over the store. It was sort of the classic city environment. He was a diehard sports fan just like I was. If anything, he knew more about sports trivia. He was a Phillies fan from the word go and we were paired together all the time. We fell into lock step together. We went on to graduate school together as well, but I remember walking out of that test and Art had left 20 to 30 minutes before I had finished and I was just befuddled. I walked out of the room and I said, "What was that all about?" And he said, "Oh, it was a snap." I said, "What snap? I don't even know what happened." And he said, "Well, you just differentiated the equation once and then differentiated it again and then you got the answer." I never had Calculus in high school. So here I am trying to take a Physics test where I didn't have the Math background in Calculus to know how to run some of these simple things. I didn't know what differentiation meant. You get these things and you can just differentiate a few times, like velocity and acceleration and position and things like that and you get the answers real quickly. It was elementary, but if you haven't had Calculus, you haven't a clue what to do. That was sort of what my introduction to Penn was all about, finding out what I didn't know. There was a period there in the first year, the first semester was very, very much a culture shock for me because I was working really hard, and finding myself struggling, trying to pick up all these things and trying to assimilate so much knowledge.

Problem Solving: A Career Solution

DSM: And you had no choice. You were a scholarship student so you had to do well.

RS: That's right, and the pressure that hangs over your head is that the free ride goes away if you don't maintain your average. It was a tough experience but I have to say it didn't cause me to question my commitment to engineering. It just caused me to wonder whether I was smart enough to play the game. I figured out I was going to have to work at this thing very hard, which I what I ended up doing. And like everything else, once you adjust and you adapt, you begin to move along through this.

The other thing I found out that was fascinating was, I joined a fraternity in the second semester of my freshman year. So again I expanded or changed some of my social surroundings. But the thing that fascinated me and I know it's going to sound an absolute abomination considering that I'm with Booz Allen Hamilton, which is so heavy about business schools and things like that, the thing that I found fascinating among my fraternity brothers and colleagues in the engineering schools was, many of those that couldn't make it in engineering dropped out and went to Wharton.

I hear about MBA's at Wharton, and what I know is how many of my engineering colleagues dropped out and went to Wharton. I also remember tutoring those same colleagues later on when they had to do the prerequisite math course or, God help them, when there was a science course that they had to do. I had to tutor those same students through in those basic domains. It was interesting and I certainly developed a perspective rather early, that if I wanted to go to Wharton I probably could do well there because I seemed to be excelling in helping others do well there.

I never questioned my fundamental commitment to engineering although I wasn't sure what I would do with it. It wasn't clear to me. I was not terribly interested in being a researcher. I wasn't interested in being a teacher. I liked solving problems. I liked getting engaged in hard problems and solving them, seeing the way through. I don't know how much of it I realized at the time versus how much of it I've picked up now that I've already passed it. What I was really looking for out of school was a challenge and lessons in how to solve hard problems, and that's what I got and learned in school.

I talk about the fact that I remember my eleventh grade English class, and I still use the lessons I learned in that class. When I look back at my college education it's hard to find very specific things I learned in any of those classrooms that I still practice today. But the one overriding thing that I learned was that I was constantly buffeted by problems, and I learned how to think about hard problems and how to structure those hard problems. I don't know how other colleges do things, but I do know in most of the courses that I was exposed to at Penn, the kind of exams that we were given were always open book exams. So there was not this reliance on memory or rote memorization of materials. It was more like, given what you've learned, how do you think about this new problem? And how do you apply your knowledge against this new problem just based on your experience of working with similar problems? I found that to be a fascinating revelation. It isn't the actual subject matter that is so important as much as it is getting you to think and how you develop thought processes.

That's my real recollection of my undergraduate education, and to some extent, my graduate education. It really was about developing thought processes. Being able to take on challenging problems and figure out what the structure was. How do you structure this problem to even begin to approach solutions, and where do you go to achieve the solution? The actual content of the problem, whether it was about electrical engineering, or physics or something like that, is really not relevant. It's really about how you take the available information and then use it to go attack a problem, and that's the part of learning that I found to be most fascinating and useful out of my whole college background.

Working for Greyhound

DSM: Academic engineering is a lot different from being an engineer when the rubber meets the road, and you never had an experience with a real engineer working in a business that had to do engineering. When was the first time that you really came into contact with a non-academic engineer?

RS: I really didn't come into contact with any of that until I graduated from college. In my college experience, my summer jobs, I always went back to Florida. I worked for Greyhound Bus Company.

DSM: Was that your first real job?

RS: I worked for Greyhound was in Jacksonville after my senior year of high school. I got a job working at the local bus station up in this room where I answered the telephone when people called for information about bus schedules and fares and things like that. Fascinating experience because first of all this was a before computer era, and what we had as a resource was just books full of bus schedules. In order to get fares you had this huge volume about tariffs that was vertically stacked and you had to thumb your way through it. If you wanted to go to some obscure place you had to piece it all together; the fare from here to here, the fare from here to there, and you'd have to look in the front of the book then the back of the book. It was fun but the most fascinating part was the interaction with the public because this was my first real opportunity of coming out of the box and dealing with the public.

DSM: Were you behind the counter?

RS: No, it was just on the phone. We were literally upstairs in a room hidden from view. You would get people calling you and asking, "What time does the bus leave?" And you would say, "Well, where would you like to go?" And then they would stop and say, "Oh!" And then they'd hang up because they didn't know the answer to that question. Or they would call and just ask, "How much does it cost?" And I would say, "Well, where would you like to go?" It was just fascinating how these things flowed, but it was a fun experience.

After I went away to college my father got transferred to Pensacola. Even before I got there, my mother went down and called the bus station manager and said, "Look my son worked at the bus station in Jacksonville. He's coming home for the summer. Could you give him a job?" She got me a job before I even showed up. Pensacola was a smaller place and I was selling tickets and handling their freight and baggage and all that, but that was my work experience. There was nothing engineering related, no professional experience base to draw any lessons from until I finally graduated from school.

My parents were wonderfully supportive parents. I feel remiss in not mentioning that before. Until I went away to college I never participated in a sporting event that my parents weren't there. My father wasn't there maybe if he was away from the country on Navy duty, but my folks were at every single athletic event I participated in. Every single significant moment in my life, my parents were there. They were very supportive people.

Pursuing Big Time Football & a Ph.D. on the Plains

DSM: So you finish your undergraduate degree in engineering in what year?

RS: I graduated in 1966, spring of 1966.

DSM: And you are accepted at the University of Illinois for a Master's Degree and Ph.D. Why Illinois?

RS: The truth to that story involves that the same fellow I had mentioned before, Art Simons. We became best friends through college. We steered our undergraduate careers such that we were in all the same classes for four years, and that was very helpful because there is a lot of sharing that could go on when you're studying and trying to solve problems. We were very compatible and we both really benefited from that. When we got around to thinking about what we were going to do next, we both had decided, I think as much from the fact that we didn't know what the heck we wanted to do, that probably we wanted to go to graduate school. We decided we probably should go and get another degree or so while we were about it.

I debated whether to go get an MBA, or to go to engineering school. The reason I debated the MBA was I grew up very shy. One of the things that used to pain me no end was all these moves I would have to make. I would have to show up in a new place and meet new people, and I didn't like that. My tendency was to sit off by myself, be quiet and not be involved. I struggled mightily with this and I remember my mother again, trying to do the right thing and saying, "Hey there's people out there. Why don't you go out and meet them?" And I would say, "No thanks. I think I'll stay over here." Finally after doing it so damned much I sort of got into the habit of how to do it. I didn't like it, but I learned how. I had exposure to new people and new things and I repeated that experience of having to be social and get out and do things until it actually turned into something that I liked. My fascination with an MBA was that I wasn't sure I was attuned to working in a laboratory or sitting around in a closet. I really liked interacting with people, tackling the people side of problems. And again, for lack of knowledge my thinking was, with an MBA you become a businessman. You apply your knowledge base in the business world, you interact more with people.

Now the thing that was in the back of my head when I graduated from Penn was, I knew that those of us in the engineering schools were inundated with job offers. Firms came on campus. They flew us around the country to interview and see things and do things. There was a great interest in engineers and there were job offers. And I knew that the business school students as they were graduating, they would have trouble getting taxi fare in downtown Philadelphia. I did detect there was a market there that was very strong on the engineering side, and less strong on just the undergraduate business side.

I weighed all the tradeoffs, then my buddy Art, another fellow from Central High School, and a couple of other fellows in the Engineering school at Penn decided to go with me on a tour in the spring of our senior year at Penn to look at campuses. We drove out and looked at the University of Michigan. We looked at Northwestern University and we looked at Illinois. Why? The why was, we felt we had spent four years in the Ivy League and we were ready to get into some big time athletics. We wanted to see something other than Ivy League football. We wanted to see some big time football. We wanted to see something that had some excitement to it.

At the same time I threw in an application to Stanford, which was west coast. I had to reject Stanford because it was financially impractical for me to try to go back and forth, and I couldn't get the financial support there that I would need. So we ended up choosing between Michigan, Northwestern and Illinois. We liked Illinois the best. It was out in the middle of the plains. It was a college town. It had good athletics. Dick Butkus was there and all those other kind of things had gone on, and we were tuned towards that. We had done some research into it. When I had gone to Penn, my class in electrical engineering had 40 students in it in the beginning. By the time I graduated it was down below 30, the attrition rate being what it was. That was a very small class. At Illinois, they had more professors in electrical engineering than we had students at Penn. That's the right mix to have because as an undergraduate, you want to be at a small school where you can get individualized attention. When you go to graduate school, you want to go to a big school where you can focus in on narrow areas of specialty and get that kind of specialized attention.

We had done enough research to know that we weren't blindly picking Illinois. It was an excellent school. It had a great department of Electrical Engineering and it had the other social features that seemed to agree with us. So, that's how we made the call to go out there. We went out together and I spent three years out there on the plains getting my master's degree and then finishing all my course work for my Ph.D.

Budding Romance & Bright Lights at Xerox

DSM: Where did you meet you wife?

RS: I met Janice, who has been my wife for, well we just celebrated our 32nd anniversary a couple of weeks ago. I met Janice through this very same Art Simons. In the summer between my junior and senior years at Penn, I had gone home to Florida and was working. I remember this because I still have somewhere stuck in a box, a letter that I got that summer from my buddy Art. Art told me that he was having a great summer, playing some baseball, watching the Phillies and he was working at the Philadelphia Electric Company as a summer job. So he, unlike me, was actually working at something related to a career. He told me, "I met this really neat girl up here at Philadelphia Electric. She's terrific, but she's not Jewish so she's not right for me, but she's too nice for me to mess around with. So I'm saving her for you."

I came back to school in the fall and Art lived up to his promise. He introduced me to this Janice Whitfield that he had met at Philadelphia Electric. It turns out her father was an executive at Philadelphia Electric and so she had a summer job there. She went to Rider College up in Trenton, New Jersey. We met and we spent the better part of our senior year dating one another, being involved in the whirl of a senior year of college, you know, the football games and all this.

Now in honesty what happened was we went through a hiatus period. When I graduated from Penn, I left Philadelphia that summer immediately after graduation. I went up to Rochester, New York and went to work for Xerox for a summer. I worked in a group that was building a new generation copying machine. At that time the Xerox machine worked with a revolving drum, the image was recorded as it went around on a drum serially. And they were just doing this flash xerography where you could put the thing on a flat plate and take a picture of it. I was working in a group that was actually developing that particular technology.

It was fascinating and I would love to tell you that I had something to do with this next generation xerography. The reality is that they were also trying to develop some public relations stuff to help display their product and how they were doing it. They had these mock-ups that they were doing about how the old Xerox would work and how the new one worked. They were using little light bulbs that would serially blink on as if it were tracking a paper document through it, and they were trying to put this thing together and control it in a way so they could show the path of a document through one system and the path of a document through the other in this mock-up. So rather than developing this new xerography, what I really did was develop the control system to allow the light to flicker around. I was involved in some really neat work but when I confess to what I actually did, I made light bulbs turn on in the right sequence as they went around this display.

The digression was, that when I went off to Rochester for that summer, I was leaving Philadelphia and going to graduate school in Illinois. We had made no commitments to one another at that point in time. I wasn't thinking about marriage, she wasn't thinking about marriage, and we just went in different directions for a while. I spent the summer in Rochester. I spent the next year in the plains of Illinois for my first year of graduate school, which I found to be every bit as hard as my first year of college. It was a different world out there and really, really tough.

Voice Recognition Technology at IBM

RS: The next summer I went down to North Carolina to IBM where I worked in the research triangle. Fortunately, IBM had made arrangements with one of the local fraternities at NC State University to provide us housing. So instead of being isolated somewhere, I came down there and was living in a fraternity house with a ready-made social environment. I had a wonderful summer. I had a lot of fun living in a fraternity house and the unfortunate part was I had a job I had to do. It was another interesting piece of work. We were working on some of the early voice recognition technology and I was in the group down there that was at the cutting edge of voice recognition technology.

We were working on how to recognize specific phrases and we were training machines to learn. That's what it's really about; training machines how to learn. This was during the summer of 1967 at one of IBM's premiere research facilities. It was fascinating because I learned a lot about language because they were working with phonemes and things like that. What we knew was that if you wanted the machine to learn you had to give it a trigger, and in order to give it a trigger you had to have a really harsh sound at the beginning of a word. You didn't want a gradual sound. You wanted something like "plug" or "do," something very harsh at the beginning to trigger the learning sequence. We were working through how to develop the various technologies to do that, and I think I was fortunate to be able to experience that. I wouldn't want to claim to have made a real contribution. On the other hand, I was in the middle of something there that was a very fascinating technology exercise.

To continue the saga, I went back to Illinois that fall. At Thanksgiving time, I decided to go back to Philadelphia with my two roommates rather than travel down to Florida. In one of those fortuitous circumstances, I got back to Philadelphia and my buddy Art says, "Let's go see if we can find Janice." At that time she was working at Philadelphia Electric Company and I remember going down to the building on Walnut Street. We went up to the 14th floor, and literally the elevator door opened and she was standing right there. She was going to get on the elevator as I was going to get off. So we instantly renewed acquaintances and I invited her to go to a hockey game. The Philadelphia Flyers had just come into existence. She accepted and from that point on, it's sort of been a continuous relationship. The magic happened when we got back together, we stayed together, and in the fall of 1969 we got married. So my buddy Art is the one who set it up. He's the one who not only set it up the first time, but he brought me back the second time to rekindle the relationship.

WESTAR & Western Union

DSM: Let's talk about your work at Western Union and the satellite launch.

RS: I came to Western Union to be involved in getting the WESTAR domestic communication satellite up. I was obviously fascinated by that. It was an interesting new challenge. It brought us down to the Washington D.C. area, which was a big change. We bought our first home in the Fairfax, Virginia, area and we had a young son and a new job. I stayed with Western Union for only a year and a half. It was an interesting time. I learned a lot. I spent a lot of time with the top management of the firm because they were most concerned with getting this satellite going, and I was involved with the people who were trying to get the program off the ground. I spent a lot of time helping them develop the concept of how they were going to sell the concept of the satellite service. How they were going to market it. What they were going to do with it, as well as what tariffs we were going to change and make it work technically. So it was a broad range of exciting stuff.

I think I was reasonably influential in making things happen even though I was a junior member of the team. I was young but I had a pretty fancy title. I was the National Director of Advanced Systems Planning for Western Union. I reported to a Senior Vice President and it felt pretty good at the time. The other thing it did was expose me to the top management of the firm, and I was very concerned with the future of the company. Western Union had a huge unfunded pension liability that made it almost impossible to get sufficient funds to satisfy its needs.

Western Union had also grown up during a period of time when it was the alternative to AT&T. AT&T had shepherded it through its existence because whenever the regulators would point to AT&T and want to talk monopoly, AT&T would say, "Well, look at Western Union." So they sort of looked after Western Union. This was also the beginning of the period when all the other competitors were coming down the pike and there was the forerunner of MCI, something called "CML," Comsat MCI Lockheed. All of a sudden AT&T could no longer afford to make concessions to Western Union because they had to go fight their own competitive battles, and Western Union became another of those competitors.

Western Union had not been created as a competitive company. It had been founded really as a company that was living under the shadow of AT&T in a protected environment. So once that shadow went away and they were exposed, they didn't have the wherewithal to fight. That's why Western Union went through a decay, and eventually pretty much has gone away as any kind of a serious communications company. I saw that coming. I was there and had a chance to interact with top management and I was not thrilled with some of the directions there and some of the policies, and I thought I really needed to find something different. I wanted to find a way to apply my technical knowledge and skills in a way that's highly interactive, that got me out with people and doing things. Through a headhunter, I got steered to Booz Allen as a place that might fit the bill, and that career goes on from there.

Joining Booz Allen

DSM: Who interviewed you at Booz Allen?

RS: I only interviewed with two people at Booz Allen, Bill Stasior and his boss, the Senior Vice-President, Ken Mundell. That was it, talked to two people. Bill Stasior at the time held the position we call "Principal" which is a level below partner. Bill hired me and I worked for Bill for 25 years. He moved from principal to partner. I moved from associate to principal. Then he moved up the chain, and I moved up the chain, and then eventually he ran the government business and I ran the government business. Then he became the Chairman and CEO, and I followed him as Chairman and CEO. We remained in lockstep during that entire period of time. I always tell people, the real secret to success is to get yourself hired by the future Chairman and CEO and then stick with him and you'll be fine.

Revolutionizing Government Communications

DSM: What did he hire you to do?

RS: Bill hired me to work on Navy communications programs. Bill's area of responsibility at Booz Allen was the client relationship to support the United States Navy in their research and development efforts on communications systems. His personal area of expertise and the area of expertise of the people that were around him when I joined was more in communications security. You can think about it as cryptography and things like that, but it's about how you secure communications links. The thing they didn't have a real appreciation for was the role this computer stuff was going to play in communications technology. So I had a background in computers and also my work at RCA in communications, and Western Union with satellites which were becoming an important part of Navy communications because you could put a terminal aboard the ship and it all worked. Bill was looking for somebody who could work with one of the clients over there who ran what they called the automation side of the house, which is about automating the communications technologies and capabilities. They wanted to link computers to that but they didn't have enough expertise. So he brought me in to fill that spot in the organization and that's what I was involved in.

DSM: When you started working with the Navy, was the Western Union commercial side ahead of the Navy in terms of satellite communications?

RS: Yes because Western Union put up the first domestic communications satellite, and they had the technology and the techniques. Now pretty rapidly after that, the military side was using satellite technologies. In terms of what the military was doing with other satellites for secret purposes, I'm not all that conversant with the details, but let's just say in terms of using it for pure communications techniques, the commercial technology was ahead. In fact one of the very fascinating changes that we've seen, one of the changes that I talk about when people question me about, "Gee, you're pretty old. What do you remember?" is the fact that when I joined Booz Allen, we were trying to utilize the research and development in advanced technology skills that the government had, whether it be at the Advanced Research Projects Agency, or the various laboratories or the various developmental programs, because they were developing the cutting-edge stuff. It was only later that you commercialized those things that the government developed. So the sequence was, the government did the heavy lifting, the upfront work, and they developed these techniques and technologies and you moved them later toward the commercial technology.

Today it has gone completely in the other direction. During the past 20 years the government started wanting to take advantage of good commercial technology because commercial technology was advancing much more quickly than the government technology. Part of it was process. Part of it was simply the fact that the government had to do so much in the way of specifications and testing, and all the other things that made them slow to market. Those things slowed their product stream down relative to the commercial world. Another part of it was just the rapid proliferation of commercial technologies, changes and advancements in technologies, and the government just couldn't keep pace with it. So the commercial world really took precedence. We've completely flipped the equation and now the government is trying to take advantage of the best commercial, off-the-shelf stuff.

DSM: Do you think the government should be doing more in terms of basic research?

RS: I don't know that the government should be doing more. I just think it needs to be better equipped to take advantage of technology applications. I think the government sometimes gets too bogged down in process and doesn't appropriately leverage the technologies. That's what I would encourage. Where the research is done is not all that important. It's important that you utilize the results to best advantage and I think sometimes we're missing that.

Breaking up Ma Bell

DSM: You work at RCA, at Western Union with satellites, then you join Booz Allen and work with the Navy on communications. Everything seems to work together to bring you to this, if there is a turning point in telecommunications, it's got to be what happened to AT&T in the mid-1980's. You began to get really involved with that when you work with Western Union. Talk about the run-up to the break-up of AT&T and your role in that.

RS: I think for me, it was a case of being in the right place at the right time. I was able to really have a lot of fun and do a lot of great stuff. I had seen what the introduction of competition was doing to AT&T. I had experienced that from the Western Union perspective. Through that I developed a pretty clear knowledge of what these oncoming competitors were doing, and how that would shape the industry. In working on the government side of things here at Booz Allen, I had a chance to watch communications technology march forward and see what was changing there.

Probably one of the defining moments for me was in the early 1980's when I made a shift in focus. I had joined Booz Allen in 1974 and I had been working with the Navy, and with a Booz Allen colleague named Luke Capone, a Navy Admiral who had come out of a background in the Defense Communications Agency. We had always had a desire to have the Defense Communications Agency as a client of ours, but we had never been successful. I had finally reached a point where I was looking for a change. I went to Bill Stasior and said, "Look, I would like a chance to take this Defense Communications Agency thing on. I want to leave the Navy behind." I was getting a little bored with that. I felt like I had been there, done that and I wanted something new, a different challenge.

Luke and I paired up and we didn't go directly to the Defense Communications Agency, which is now known as the Defense Information Systems Agency (DISA.) At that time DISA was headquartered in the same building with something called the National Communications System or NCS. The 3-star Army General who headed the Defense Communications Agency was also head of the National Communications System. The National Communications System is the emergency communications capability that serves the President of the United States. It's not something that's very well known but is an outgrowth of the Bay of Pigs disaster and other kinds of problems where we had real coordination crises. The government put the National Communications System in place to support the President at whatever emergency that might arise. And that emergency could be anything from a natural disaster, for example when a hurricane hits and we lose communications capabilities in part of the country, the NCS can go in with temporary capacity. When the President travels and needs to have a robust communications network put in place to be able to serve him wherever he is going to be, the NCS does that. You can see how this has evolved over time because I'm talking about 20 years ago; the NCS would go in and put that capability in place and ensure it worked. And of course the ultimate threat is in the case of a nuclear exchange, the NCS looked at what kind of survivability we need to have in order for the nation to be able to maintain its communications structure.

So the NCS was the organization that was charged with doing that. And the NCS is an umbrella organization that really has oversight over 22 different federal government agencies and departments. It holds together the Department of Commerce, Treasury, Justice, Defense, all these people to create a robust and rich infrastructure. The NCS doesn't necessarily own these resources. It just has access to these resources, and part of its challenge is how to put together the capabilities to serve these needs. The communications systems don't have to be up and running at any given time, they only have to be there when you need them.

So you have to be able to get access to them and as you might imagine, working with the NCS is both a technical challenge, because you have lots of different providers and you need to be able to link their capabilities together; and it's a political challenge in terms of getting 22 different agencies and departments to work together. It's also a business challenge because you have to get all the players, government, industry and everybody else, to work together. It's a policy challenge because you have to get the regulators and the Congress and everybody else to work with you to create these solutions.

Luke identified an opportunity to get into the Defense Communications Agency through the NCS side. NCS put together a procurement to acquire a support contractor who would come in and help them start to develop these ideas and concepts. It's a very interesting story, how we won the work, and I'm not going to bore you with that, but we did win the work against a lot of long odds. We went to work and turns out that the fellow who ran the Agency at that time was a 3-star Army General by the name of Bill Hillsman. Bill had the nickname "Wild Bill." It was well earned. He was a guy who understood that when he wore his military hat he had limited access, but when he put on the hat of the NCS he had access directly to the President. This was a guy who was very politically savvy. Unlike many people in the military who were focused on their DOD job, he was more focused on his NCS job because of the visibility it gave him.

We then were the access point for him because Booz Allen could bring a multitude of skills to the table, both technical and commercial. We could bring our commercial management consulting people in to the table. We could bring all sorts of assistance in for him. We quickly were very successful at working with Hillsman, and therefore in creating the NCS. And this was a period of time when the NCS had to deal with the fact that, as it had been born and started to evolve, it simply went to AT&T to get service. If the President was going to fly to Indianapolis, they called AT&T and said put in more circuits. If they needed a hardened requirement, they called AT&T and told them to put in a hard (secure) line between these two places. AT&T would do it. They would then take the cost, imbed it in the rate base and you and I would pay a penny more a year in our phone bills. That's where the cost went. So the government didn't have to pay, and they didn't have to compete it or anything else.

DSM: So your first connection with AT&T strictly speaking, is at the level of a pretty significant customer base?

RS: Yes, but we're now talking early 1980's. So the consent decree has come down from Judge Greene that's going to break up AT&T. So now the government is being told they can't just go to AT&T, they have to go to other providers. The government can't make a deal on an exclusive basis. So they had to put together solutions that involved lots of people, and oh by the way, the question arose, who's going to pay, because now AT&T is in a competitive world and can't take their costs and imbed them in their rate base because their competitors can give the service to customers much cheaper. So the whole world changed, and it changed very dramatically for the National Communications System, which is the government infrastructure.

We were the ones who were involved in working the government through that change period between a single provider, monolith in AT&T, to a multiple provider, competitive environment, and all the ramifications of that. So that's on the government side of the business. At the same time, Booz Allen Hamilton served AT&T as a client. And so they're one of our large, commercial clients and they're going through the rigors of divestiture and what that means, and how to restructure their company and what the implications were. I in turn, and again, without conflict of interest, which we validated with attorneys on all sides, got involved in working with AT&T in how they actually separated their assets. In other words, what they kept for AT&T and what they gave to the new regional Bell operating companies. We were actually involved in making judgments about what went where and how. I personally sat in the middle and worked with the executives from AT&T and the regional Bells in figuring out how to separate out this whole complex network and infrastructure, and putting the pieces together. So there were two things that came right together. I'm working with the government, I'm working with AT&T, they're very much related and right at the cutting edge of probably what is one of the most significant events in telecommunications history in this country.

DSM: No question about that. For the record, give some idea of how long this processed stretched.

RS: I guess I don't know how to put a time frame on it. We had a hard and fast deadline. I believe it was in 1984 where the judge had ordered the assets separated. So we were working against a deadline of a couple of years to actually develop the methodologies of the separation of assets. The process probably went on years after that on substantive terms, or still working out the details because nothing is ever complete. There are always lingering loose ends and things that need to be settled out, but it was a period of many years. Today what we're looking at is a reconsolidation as opposed to a continuation of the process because the competitive dynamics have changed so dramatically.

DSM: So, working for the government, you were juggling the interests of at least 22 agencies. Then on the AT&T side you moved from having one customer to having, you worked for all the RBOCs as well?

RS: We worked with a consortium. So we worked for one client but it was AT&T and 7 RBOCs. We had 8 of them together, but I wouldn't claim that we worked for all of them individually. We worked for that group which was trying to solve the separation problem. Eventually I ended up working personally for several of the RBOCs separate from the development of networks.

Advancing IT at Booz Allen

DSM: In 1994, you become President of the Worldwide Technology Business. Tell me about that evolution, transition.

RS: Well I had grown over time. As I mentioned, I started off working with Navy clients. I took over NCS work. I was always involved in doing commercial work. I had both an interest in it and a skill set of being able to apply my technical talents in the commercial environment, and I enjoyed a lot of the interaction. I always say the government cycles are long. When you go through competitions in the government, their RFP's and proposals, there are long cycles. In the commercial world, it's very dynamic. Somebody has a problem. If they like what you have to say, they buy your work and you start to work that day. So there's a certain re-invigoration to the fast pace of the commercial world, and I have always enjoyed that.

As I went through my own career in the middle 1980's, that's when Mike McCullough succeeded Jim Farley as Chairman of Booz Allen. Mike McCullough was Bill Stasior's boss. It was kind of looking at a linkage here that goes from Mike McCullough to Bill Stasior to RS. All three of us have cycled through the Chairman role. Mike took over that role and Mike, shall we say, leaned on me to go to New York and spend a couple of years leading what we called our Commercial Information Industry Practice, which focused on telecommunications, computers, all those things that were related to the information industry back in the middle 1980's time frame. I kept my hand in the government work with the NCS but I also went to New York, spent a couple of years leading the group that was doing commercial information industry work. It gave me experience on both sides of the business.

What to Be, What Not to Be

RS: As we went through our continual restructuring, I came back to focus more in running a major group in the Washington area. It was called the Advanced Technology Group, and it was doing exactly what you would expect it to do. The group was working in cutting-edge technology stuff primarily in communications, computer technology, and the military parlance, Command Control Communications and all those things. We also had a strong commercial presence. We were doing a lot of work in network design and development in the commercial world.

All of that led up to the 1994 timeframe. In 1994, the partners in the government business, which we called our Worldwide Technology Business, went through an evaluation process to assess where we were and where we wanted to go. We made some judgments that it was time to make some changes, and they wanted to head off in some different directions. They asked me to take on the leadership role, to lead the Worldwide Technology Business, and I undertook that mission.

Booz Allen has a strong entrepreneurial culture, and in my tenure with the firm, I would say from 1974 to 1994, I had seen a lot of strength built on this entrepreneurial culture. But that culture has one very distinct disadvantage, and that is it tended to encourage people to operate independently as opposed to in teams. So a lot of us, myself included, had built a lot of strength around our individual capabilities, and we had emerged in this business with lots of individual pyramids of success. But the competitive landscape was changing quite dramatically out there. We were seeing procurements that used to be small procurements become huge procurements. You can't compete with that on an individual basis. You need the full power of the institution to compete. Sometimes even the institution isn't big enough. Sometimes you need to team with other institutions to have that strength and capability.

I think we came face to face with that and when I was asked to take on the leadership challenge, the question was, how we would mobilize the resources of Booz Allen & Hamilton to compete as an institution? Because the marketplace demands it, and our future success demands it. So that was my challenge and mission, getting Booz Allen to compete as an institution and mobilize and organize our resources to do that, and do that effectively.

It also involved a strategy of focusing on what we wanted to be and what we didn't want to be, what we wanted to do and what we didn't want to do. In the government business we charted a very clear course, which was we were going to be the best. Wherever we decided to play, we were going to be the best. If we couldn't be the best we didn't want to play, and that meant there were some businesses we get out of because we can't win.

DSM: So choosing what you don't want to do is very important.

RS: Very, very important, absolutely. We evaluated some things like doing large scale systems integration work and we said, we can't be a dominant player in that field, we don't want to play. We went about changing our portfolio and focusing on those things that would make us the best. We did institution building behind that, in terms of working with our people and people development and implementing other programs in a way that we were able to focus on how we achieve this reputation of being the best. And I think we were pretty focused on that goal. We were pretty comfortable and confident that we were working towards that goal and would realize that goal. Some times you need independent verification and validation that what you're doing isn't just patting yourself on the back indiscriminately. But I think the kind of feedback we got from our clients was very consistent with that.

Finding a Few Good People

RS: One of the experiences that I remember the most was one that took place in the 1997 time frame. It was somewhere mid-stream in this process. We are always looking for good people, and recruiting good people is a challenge. So in trying to get more good people on board we decided to tap our internal resources and ask our current staff to invite people that they knew to come to an open house here at Booz Allen. Without any advertising but word of mouth and invitations from our folks, we put together an open house here at the McLean campus. We did some planning for it and hoped to get 100 maybe 200 people. They were going to offer some light refreshments and have people here so you could at least meet somebody, not a formal interview, but talk to somebody and we could do some initial screening. So they decided maybe they should build infrastructure for 300 people, and somebody thought it wouldn't hurt to have food for 500 because it won't go to waste.

Unfortunately, the day that this was going to happen was a January day, and it was one of the worst weather days we have had. It was not snowing but it was raining, a cold rain with temperatures just above freezing. Now this event was supposed to take place at 4 o'clock in the afternoon and our hearts and spirits went down when we saw the kind of weather we were going to have to cope with. By about 4:30 in the afternoon, we had the Fairfax County police out here trying to unsnarl traffic and get things squared away. We had our Chief Administrative partner out there parking cars, valet fashion. We had people that were being called out of their offices to rush down stairs and do interviews.

The bottom line is, by the time we shut down that night we had 1,750 people that had come through the doors only on the invitation of their colleagues. And all because they had heard that this was the best place to be, the best place to work and they wanted to be here. We were looking for some independent validation that the programs we had put in place to be the best was having impact in the market. And I think that the best vote you can get is from that kind of response. There is no way we could have staged that. There is no way we could have asked for it, we just got it. And I would also point out that despite the fact that we saw that many people, we hired less than 100 out of that exercise. I say that because it did nothing to change our standards, but it was a reflection of the fact of how sought after we were as an employer and how people really wanted to be here.

Surfing Against the Dot Com Wave

RS: That was in the middle of an interesting growth period really for the whole industry, because we were obviously looking for people. We're always looking for people. Even today as we speak we have requisitions out there for 500 plus people that we could put to work today if we had them. But we had been through, and were in the midst of a strong go, go period. When the dot-com economy took off, we were well positioned because we were ahead of that rush. We had developed our people strategy in advance of the dot-com mania because we felt the time to do it was when we were strong. So we developed a lot of programs to attract, train, develop and retain staff, and had a firm program in place.

But when people were getting the kind of offers waved at them, the kind of money that was waved at them, it distorts the industry. All this money was being thrown about and people were no longer interested in how much salary, but what kind of ownership share they could get in the business. And a firm like ours is built on a partnership where you have to work a long time to be a partner. We don't just pass out ownership. We're not a public company that can use stock as leverage. So the whole industry went through a great period of dislocation as we saw this dot-com thing take on a life of its own and rise up, and it affected all dimensions.

I started off looking at it from the perspective of being the head of Worldwide Technology Business. I later on became Chairman and Chief Executive Officer, where I worried about it from the perspective of the whole firm, including commercial, and the pressure it put on us was enormous. There was an unanticipated demand wave out there. We had to go through an assessment in which we wondered if we had to change our compensation structure. We had to compete on campus for MBAs, but even the established institutions couldn't get attention from MBAs because they were going to dot-coms where they could become part owners and billionaires overnight. This whole thing was feeding on itself out there and it caused a tremendous amount of dislocation in the business industry; the technology side, business side, all sides considered.

DSM: Did you lose a lot of people?

RS: We did not lose a lot of people in our technology business. We lost some but it was inevitable. In our commercial business we lost a lot of people, because we tend to hire people straight out of MBA schools, the better students from the better schools. They spend a couple years at Booz Allen getting trained, how to be very skilled at solving business problems and business issues. They're very attractive targets for these new businesses that are trying to form up because they have the background and experience that they directly need. And we can't do anything in the way of salary when they're offered these dramatic returns on stock appreciation and everything else. So we took a battering in the commercial business because we had nothing to compete with. We even evaluated changing our ownership structure and our bonus structure. We put in place as many things as we knew how to put in place, but the reality is as long as there was a story a day about a new millionaire, it's pretty hard to make hay against that. We did as best we could. We suffered like everybody else. We fought hard, but like everybody else we won some, we lost some.

It wasn't until we saw the cooling of that wave that all of a sudden we saw dramatic change. Our turnover rates have dropped way down and we're seeing a complete change in the industry. This is now being joined by a financial set of economic conditions in the country, which have depressed everything. So we have gone from the height of dot-com mania, the heights of that hill to the valley we're in today. So it's affected not only us, it's affected our clients and the whole industry.

Now you read the stories of the MBAs of two years ago that were having their pick of choices of established companies, dot-coms, whatever for big bucks, and now many of them are not able to get a job at all. We're seeing the complete flip from one side to the other. Dramatic change.

September 11, 2001

DSM: I want to talk to you about September 11th, but I want to start in July of 2001 and have you talk about it from that perspective. In that month, you were presented the David Sarnoff Award for lasting and significant contributions to world peace. Then in September there was the terrible attack on New York and Washington here on the Pentagon. Talk about that. You lost, I know, three people.

RS: I was actually in New York. Even though I live in Washington, I was in New York on September the 11th. We had a meeting going on where we had about 185 of our partners from around the world assembled in New York City. Fortunately for us, we were in Midtown. We were at the Plaza Hotel, which is at Fifth Avenue and Central Park. We had met all day Monday and we were just beginning our Tuesday morning meetings. I was in with one of the groups when somebody came into the room. I could tell something was happening but I had no idea what.

Word began to circulate about what was going on, and as you might imagine people abandoned the meetings. A TV had already been set up in our service center, so people went down there. By the time the second plane crashed in, people realized this wasn't an accident. I think the first blush that we were hearing is that a small business jet had crashed into the tower, and gee, how terrible. How could that have happened? And then you start to realize this isn't an accident. Of course after that we became totally fascinated with what was on the TV set. At the same time, our reaction was one of horror and fascination. I think we were like everybody else, just glued to those visuals trying to take this in and comprehend something.

I told a story at the memorial service we held, that is still a vivid story in my mind. I can only liken it to when you have a nightmare, a bad dream at night, and you somehow in your subconscious realize that it's only a dream and you keep telling yourself, "Wake up, wake up! This will all be over if you get yourself back to consciousness." And I had the sense of telling myself to wake up, that what I was seeing here couldn't be happening. It wasn't real. It doesn't happen like this in the world. These are not realistic events. I'm a big fan of novels. I read Tom Clancy. I read these stories and sometimes the stories themselves are too far beyond belief to accept them as stories, but this is not what happens in the real world. We stood there with fascination and watched what was going on.

The other event I remember was, I'm an engineer, electrical not civil or mechanical, but I remember when the first tower went down, I turned to some of my colleagues and said, "How could that happen?" There must have been a secondary explosion or something because it looked like a perfectly staged demolition in terms of the way it collapsed. I said, "That couldn't happen, could it?" And one of my engineering colleagues said, "Well, something has happened structurally there that has changed this building." He is also a pilot and he said, "The heat that jet fuel burns at can melt metal, and something like that is going on." My first experience was disbelief. I went through what everybody else did in terms of watching it happen on TV even though I was in the same city.

At the same time I was simultaneously worried about our people. We have people that would have necessary business in the World Trade Center on a daily basis. For example, some of our people work for the Port Authority, which has offices there. They are a client of ours. We have no permanent people located in the building but we have people that would be traveling through the building, or people that would be in the vicinity, in the other financial buildings around there. So immediately we launched a search for our people within New York. We were trying to get everybody accounted for, a roll call. We began to feel pretty good until we heard the story, and again we're in New York, not in Washington, we begin to hear the story about something going on in Washington. The first tales were very disjointed. What we were hearing was, there's a bomb outside the State Department, there's a fire outside the Mall. There was a bunch of disjointed stuff and it was only later that somebody said that there was smoke around the Pentagon, but it wasn't clear what had happened.

So we were beginning to pick this up piecemeal, but our worry quotient was now shifting because Washington is a more compact area for us and we have more people here. So we began again to survey. The irony of it was, the first report that came in that caused us concern was that we had actually three of our people that were unaccounted for at the World Trade Center. In other words, they were on their way to the World Trade Center and we had no idea where they were. So we became worried about that. We have a number of people that on routine business would be in the Pentagon everyday. In other words, they happened to be working on site. We had accounted for those people and were beginning to feel somewhat good.

It wasn't until later in the day that we realized that three of our staff had actually gone to the Pentagon that day very specifically to brief an Army 3-Star General on some programs that have to do with survivor benefits of all things. So they were actually in a conference room there, briefing the General. As the day went on and logistics information emerged, it turns out that they were virtually at ground zero where the plane had hit. So while they were unaccounted for, we really had a sense of loss that that had happened. And it was very late in the evening when I got the word up in New York confirming the fact that there was really no chance. Fortunately all of our other people had been accounted for, and we understood and knew the whereabouts of everybody, except those three people. So that's what faced us at the end of the day.

I have to say though, another reaction which will again stick with me is, as the day went on in New York, we returned to some semblance of our business because we had gathered people there from all over the world and had a limited window to get that done. We obviously were very focused on external activities and I was fascinated that as the day wore on, the streets of New York emptied out. Of course they had placed an embargo on any traffic into the city and they had finally agreed to let traffic out of the city. The yellow cabs that populate the streets come from Queens and other places. They don't come from Midtown. So they were gone and you saw the city empty out. I remember by about 9 o'clock at night going back to my room, looking out the window in the corner of Central Park and Fifth Avenue, seeing nothing. It was a snowstorm without the snow. You know how a blizzard blankets the city and there's no traffic, nothing moves? It was that, but there was no snow. One of my Senior Partners told me the next morning that he was so fascinated by it that he walked out of the hotel and walked down the middle of Fifth Avenue because there was no traffic. He said, "I just had to experience this, walking down the middle of Fifth Avenue."

I guess the other lingering memory that came the next day was about our German partners who went to St. Patrick's Cathedral just to experience some of the magnitude of what was going on, the magnitude of the emotions. They were Germans, not Americans, but it pointed out the bond, the linkage that was there between people that had nothing to do with nationality or anything like that. So I guess that was my first real hint of what we have experienced since then, which is this universal bonding that has gone on. We see it of course in the U.S. with increased patriotism in our country. But the linkages to other countries, the shows of support that you see at the Brandenburg Gate in Berlin and our embassy in Paris and all these kinds of things, are truly incredible but not surprising when you have the context.

As an institution we had to step back because we lost three of our people and it's a terrible tragedy. But I guess in the context of everything we experienced a loss, others experienced a greater loss. We have certainly done our utmost to reach out to those who were impacted and affected, but we're like everyone else, we have a certain emptiness that's there.

My own story that tied it back together is that I typically ride the train back and forth to New York. The planes have become too difficult to cope with, the delays and whatever. I remember very distinctly riding into Manhattan on Sunday afternoon before this happened, it was the 9th of September. It was very late in the afternoon, and as you come out of the Newark terminal you start to make the big bend by where the Meadowlands are. I always look at New York, and I'm always fascinated by those two towers. This was late afternoon and the sun was glinting off the sides. Wednesday evening, the 12th, when I finally made my way out of New York on a 5 o'clock train and it was making that same bend, I couldn't resist looking back and seeing this hole in the skyline. The towers are not there anymore. It's profound.

DSM: It is. It used to be the Empire State building here over the line of hills, and towers there.

RS: There's nothing over there now.

Honor, Character & the Changing Role of IT

DSM: One of the questions I usually ask is about honor. I'm a Tom Clancy fan myself, and in one of his books he defined honor as a debt, a behavior you owe to those who expect it of you, those you admire, those who set your standards. You're part of something called the Council for Character Education, it's obviously something that's of great interest to you and your own reputation is extraordinary in that regard. How do you define honor? Is it a debt? Is it something you are born with? Is there a person who comes to mind when you think of honorable behavior and integrity?

RS: I don't know that I can take such an important concept as honor and attach it to a person, an individual. We have as an institution, and I like to think that I as an individual have invested a great deal in this issue of values; what values mean and more importantly, how to live and manifest those values everyday. Honor is obviously tied into the whole value chain. I think it's ironic that the reference you make to Clancy, unless I am mistaken, is actually a misplaced honor in "The Debt of Honor," which is the crashing of the 747 into the Capitol Building. But that's instructive, the concept of honor as a transferable commodity, not an absolute. So how one manifests honor is a variable. By itself the word doesn't necessarily have impact. It's the application of honor and the utilization of honor.

DSM: If nothing it's a lesson in choosing to whom you owe allegiance, carefully, and for young people, they don't have very much choice.

RS: I think in that context, and without straying too much into the political world, one of the things you can relate to, character education, living and instilling values, I think is manifest today in what is going on in the world. One of the things I find most profoundly disturbing is the fact that these kind of behaviors that have spawned, the World Trade Center and the Pentagon disasters, are behaviors that are supported as if they were understood by large segments of the population. And I'm really troubled at what I see as a disconnect. Where you hear the rhetoric, when you hear the dialogue today emerging from some countries, there is a strong conviction on the part of many, many people, meaning millions and millions of people, that the September 11th attacks were justified events against an evil force. Yet I know, you know as we sit here, that the United States has its flaws and faults but we are far from an evil force that deserved that kind of behavior.

But the process of education, the process of sharing knowledge, the whole process of disseminating information, is so incomplete and imperfect. It's somewhat appalling to realize that you live in an age of instant communication where in the United States, you can see anything instantly on TV, that in the world of the Internet you can basically get anywhere in the world at the tap of a button, and yet we have people who have no access to legitimate information from which to make judgments. So when you put things in that context, that's really one of my greatest fears today, that globally we are not equipped to be able to have a legitimate dialogue and discussion about the issues facing us.

Absent that dialogue, it's very hard for me to see how we make it beyond prejudice, and hate, and history, to talk about solutions and creativity and resolution and compromise. That's what I see out there. That is the aspect of this that I'm having a real hard time getting around.

DSM: You've spent your whole life, your whole career, teaching people how to apply this technology, advising people how to apply this technology to do good things. So tell us, have the events of September 11th changed the role of Information Technology?

RS: I think absolutely. If we had had this conversation two months ago, I am sure my tendency would have been to lean on the technology as the solution. And I think I would have probably have engaged you in a discussion about how far the technology could take us, how we could leverage it, how the additional distribution of technology and utilization of technology is what we need to solve this problem. I don't feel so confident about that anymore. I'm much more convinced today that the issue is an issue of human interaction, and it's how we interact with one another and how we treat one another. I don't want to trivialize this but, the personal and interpersonal dimension is really the dominant force here, and how we go about changing the dynamic, how we go about changing the rhetoric.

Now we've seen some things that are very good. I'm amazed by the change in the dialogue in this country. I am among those that were just fed up with and appalled by the political rhetoric that was so divisive and so destructive, and quite frankly it was leading us nowhere. I'm amazed that in a month's time we have returned to reasonable discourse, compromise and we've an opportunity here to discuss legitimate issues. So I know how it happens in an affected culture, which is ours. The question is, how do you leverage that beyond what we have right here in this country and engage this debate on a much broader, global scale? I don't know how to do that, but I believe that's the key challenge. And it is with great despair that I start to think that maybe it can't be done, because if it can't be done, then I don't know how we resolve the issues that are out there.

We have such a fundamental divide today that if in no other way, gets defined by religion. With the number of people that are participants in the Muslim religion today and given the people that aren't, if we allow that to be the defining point for the dialogue as whether you're a Muslim or not a Muslim, I don't see how you win your way through these issues. Right now the U.S. had a big stick and there are ways to apply that stick. That's not the important dimension. The important dimension is what you do with that, what's lasting. Warplanes and bombs and things like that have temporary impact, but after that you know, we've been through wars before, when the war is over you have to build something from what's there, and what's the foundation that we're going to build from?

There has got to be the legitimate dialogue, the understanding, the interaction. And in that's where in some respects I can come back to values, character education, helping the children. The programs that I care about in some small way do that. Unfortunately, they're not global. What is the global answer that will enable us to wrestle these things to the ground? You would like to believe in institutions like the United Nations. You would like to believe in the strength of nation-building out of the U.S. and its allies and all of that, but boy, the amount of masters one has to serve in this equation and the complexity of serving those masters is enormous.

Yes, I am very worried today that there are issues of such complexity and such scope, that getting after them is beyond my comprehension. I can only do what I normally do in problem solving, and I know myself well enough to know that when challenged I sometimes look at the problem as being so huge that you don't want to get started. So I start right where I can. That's just my technique. If it's only, boy I don't know what to do, I had better straighten up this part of my desk because that's where I can start, and from there I can build. And I think we're going to have some of that kind of logic. If we're going to worry about it from the global domain, it is too big. How do we start solving pieces of the problem? How do we segment these things into manageable subsets and go off and attack them? Recognizing that while you're solving this problem other things are getting loose, but if you don't start somewhere, you don't start getting after solutions, I don't think you have any chance of getting after this big problem. Because I think it's huge. It's huge.

A Legacy of Inspiration

DSM: This question is sometimes the most difficult. Perhaps more so now particularly after what Booz Allen has been through, and what the nation has been through. Given that this is going to be seen by interested graduate students some 3 or 400 years from now, how would you like to be remembered for this role in this Information Technology Revolution?

RS: We've had a chance today to share a lot of my experiences. Where I came from and some of the bases I've touched as I've marched around. It's been a good run, a fun run. There have been a lot of exciting experiences, a lot of neat things. I guess I don't have any delusions that I personally am a shaper of the Information Technology past or future. I just played a role in it with lots of other people, and hopefully have done some good things. If I want to measure impact, and I want to think about my role how I would like to be remembered, it's got to be more on the people side. I take a lot more pride in that.

When I think about my role at Booz Allen, there are a lot of smart people at Booz Allen, a lot of people here that probably understand business better than I do. A lot of people here that probably understand Information Technology better than I do, that can probably do this or that better than I do. What I would like to think is that I have been able to pull together the institution, and help shape the institution around a set of values that will endure. So that 300 years from now, or 400 years from now, people will still hold dear that value set. People will say this is the guy that, if he didn't set us on that course, he at least made sure that we steered down it, and that he played a role in that.

I would like to take that role beyond simply Booz Allen, and that's where the community comes in. I was privileged to get a number of awards. These awards in large measure are reflections of what Booz Allen does. I just happened to be the guy in charge. Now I can't be out of step with that, but on the other hand a lot of people do a lot of hard work to make those things happen. I would like to be known as a guy who was a catalyst, who spawned other people to go do that. We saw a statistic the other night at a black tie event that said 60% of the people at Booz Allen participate in community work every year. I would like that number to be even higher. I would like to multiply my impacts. It's not me. I haven't invented anything great.

I haven't built anything great, but perhaps I can be the one who inspires other people to go off and do great. I'm very pleased and proud of affiliation with things like "Neediest Kids" which is a charity here in the Washington area that does good stuff. Some of that good stuff is pretty simple. Kids that can't afford glasses, we give them glasses. Kids that can't afford a haircut before they go to school in September, we get them free hair cuts. We get clothes, give them coats to wear, things like that. But if these kids can be better kids, be a better part of the future because of what we did and what we touched, that's powerful stuff. That's really where I want to be.

I want to be in the middle of things as somebody who enables. Someone who gives other people both the freedom and perhaps the encouragement to go off and do what they can do, and can live up to what we take pretty seriously here, and that's the idea of striving to be the best, whatever that may be. Your best and my best may be different. You can be your best and I can be my best and we don't have to conflict with one another. That's the world I would like to live in. That's the thing that's most important to me.

DSM: I can't think of a better way to end this interview. That's a legacy to be proud of and an honorable one indeed. Thank you very much.

RS: Thank you, it's been fascinating, I have enjoyed it as well.