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Interview with Joe Pane

RCA Heritage Program

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[START OF TRANSCRIPT]

[00:00:08] Joseph Pane: Joseph Pane. The division was... Communication Systems Division. Principly design and equipment.

[00:00:24] Female Speaker: What was your first project that you got to work on?

[00:00:25] Joseph Pane: The first project... I was hired for a project called AUTODIN Automatic Digital Network. A very major program for RCA and about 60 million dollars in 1960. When I joined that program I was senior engineer on the program and I had the responsibility of integration on the site of all the equipment. That's it.

[00:00:52] Female Speaker: That's it? What are other major projects that you had the opportunity to work on?

[00:00:56] Joseph Pane: Well, that lasted a few years. It was a major program. I went to ATL, Advanced Technology for a year, working on a concept what they do on in-line which it was a kind of digital chip to mount on a printer circuit boards. Then their other program which we call IVCS, Interior Voice Communication System for the Navy on a big ship called LHA. The LHA was a landing helicopter assault. That was a major program. It required a lot of traveling to California to meet with different people to define the system, making milestone and so on, yeah. Then, I got involved into Secure Communications. This is now around 1970. Secure Communication, principally, we worked for National Security Agency, the Department of Defense and National Security Agency. Our portion of RCA was to design equipment, which met the criteria of preventing the enemy from tampering with whatever the people in the field that were working in the same transmitting data or voice. That program mentioned we call FALCON, which you have a plate here. It became part of a family of 11 pieces of equipment for the party of supplication.

[00:02:47] There was an overall system, which was called the TRITAC. It has several major systems. RCA portions was used on all of them. But the major program portion of that was the voice communication system called KY-68. We have one here. We built about 60,000 of those like that, through the years. Eventually, in 1979 that became a production program. RCA

had never built equipment in larger quantity because they were very happy as a system design house. They were recognized, throughout the United States and doing very well. Let somebody else resolve the problem for manufacturing equipment. But, in fact, that became fortunately, one of my tormenting ideas that we should build equipment. It wasn't easy because RCA was making relatively good profit. Everybody was happy. We were getting raises. So why, all the contract become in the house, they were called cost plus, means whatever it costs you to build, it's okay. We'll give you a profit on that. At that time the profit might have been seven or eight percent. So, it was a pretty reasonable thing. The idea of introducing a new division to build equipment that RCA built, I mean designed, was new, for RCA. In fact, it was also new for NSA. But we won this contract with \$50,000,000 dollars. It was cost plus. My idea was to tell the government that we were changing this from cost plus to fixed price and we had to return their money.

[00:04:49]

That didn't go well at RCA at all because, you know, you're crazy and all financial people they want the position. Well, to make a long story short about two years later we relented a bit and we bid and we won another contract. By then the overhead rate was changed which means that setting up this new division was underway. It would get won and the first contract was \$62,000,000, that was the same kind of equipment; beautiful win. So that absorbed a good part of my life. Now, through this career I was growing up, manager, directors and such. But in 1979, when we had this major win I was made an independent division. Still reporting to a local vice president. It was an independent division because we would begin to ship equipment from that division. In fact, in 1992 when the division was... 1991 when the division was officially created I had the honor of being the first vice president to run that division. Continuing with that there's ... do you want to ask another question or this is okay?

[00:06:19] Female Speaker:

This is good.

[00:06:25] Joseph Pane:

Starting in 19... in fact, in 1981, '82 when this become a division. NSA was interested in the new project, which was called STU-III. That's the list name, secured telephone units. The previous secured telephone STU II and I were essentially the size of, like this cabinet, \$35,000. The one that was scoped by NSA specified by NSA and given to three-- for competition, to three producers for the company and one general manger

to assure operability of all three systems. . But, that began to be a really significant change because the... we at RCA were used to..., well the whole industry. You make bread boards, you make first articles, you test them and then you release them. It's about a five year term before you put in equipment again. With this new system, NSA had such a terrific advantage in that industry. We became essentially good partners with NSA. It never happened before. We began to have meetings that were discussing, all three people, even though we were fighting one another to get the most money, we began to relax a little bit and say here's one of my equipment working so that people in Boston know that GTE, they were the overall manager could make sense. It was an enormous, enormous success and there we have a simple reason as to why they want the STU-III there. We built 200,000 in Camden of that.

[00:08:35]

The success of that is the next unit where Jim is familiar with and that is the STU... just the STE, Secured Telephone Equipment. Which is a successor to that with more data, more capabilities, faster. But the important part of this is that this equipment went from \$30,000 to \$2,400. The first one, the KY, to STU-III. The other one was a little more expensive because there were a lot more complexity involved. So this is 30 year equipment that I have, at RCA. What else do you want to know?

[00:09:13] Female Speaker:

Well it sounds like you got to work your way up through the ranks pretty well. How did everything change when RCA merged with GE?

[00:09:29] Joseph Pane:

Well, significantly. No one was prepared for that step. RCA was run by a president which unfortunately three consecutive ones were accountants, finance people and they only look at the bottom page, the bottom line. They didn't look at develop engineering, the product, you know. But, nonetheless, when the announcement came that GE was buying, it was a shock, a mere shock. I was very busy, I had won a contract and this is now November 1985 when they made the announcement. Just a week before I had won a contract for the FALCON program equipment. \$560,000,000 for RCA and the program was a \$4.5 billion in capital for the GTE account. So, I had a pretty good solid stay with that kind of success. But, I wasn't very happy. GE was a great company. They always had management resources that are unbelievable but the... we at RCA essentially lost out to the way they reorganized things. I

left two years after GE bought and I started my own company working for NSA then. So, there was significant change and more people we talking to... well, maybe I tell it.

[00:11:28]

There was a gentleman that we invited, Mr. Mastran, about two years ago. He was an Executive Director with Corporate Strategy. A strategy planner for organization expansion. We asked him, Jim and I, we were in Lancaster, said, "You think we could survive this thing on our own?" "Absolutely." He said and he was in the know because he knew all of the division. So that makde me feel better but in the meantime the company was gone already. It was a major change. In fact, the... well Jim will tell you more about that. There were several steps of transition, like that.

[00:12:12] Female Speaker:

Okay. We all know the RCA family bond was very tight. Can you talk about the social life a little bit, with the company and outside of the company?

[00:12:27] Joseph Pane:

RCA...From the very beginning, 1919, saw the future in technology, new advancement and they always thought of the next program. They had so many firsts over the years. RCA was in business 66 years in South Jersey and Camden was the headquarters. Everything that was developed that go into one of the divisions. Television in 1939, color television 1954. That was the hub of what Camden, of what really became of RCA. The concept of family was a serious one. Today we go to luncheon to the RCA retirees and they still talk, "remember. we had a family". The idea was that GE in the 40's after the war changed it from military support to our government to commercial, began to realize that there were unions involved. Management had to play a role, which governs as opposed to dictate. I honestly believe that they did that. They begin to ask people who work for RCA, they said, "Did your wife finish high school?" You say, "Yeah." "Ask her to come and apply for a job in accounting or secretary." The next two or three years this significant number of people all of a sudden had two members of the family. Two major improvements, one to the family, second income now, never had before. Women in South Jersey here, maybe there were 20, 30 secretaries, but in general they don't have any worth.

[00:14:22]

The other was to the demographics because by having this they be able to buy a better house, bigger housing. In the meantime, the creation of a hub of technology in South Jersey bought 4,500 engineers from all over the country and some

from other countries, like me, and 12,000 people. So, I call that became a very serious section of the population, called middle class. They stay there. So, GE (Joe meant RCA) deserves the name that they created this idea of family for that. They were in a magazine reflecting this idea that they monthly announce how many people were retiring or promotion, etc, like that. But, in all this RCA create more ideas. For instance we used to take courses in the evening and a smart engineer says, "Hey, you want to hear about this program?" We would take them. A lot of engineers that was a way of a journey yourself. Even engineers, after four or five years they become obsolete unless they follow-up. So, RCA knew that and they had an open how many class we want to do that. So they would sponsor directly from them. Program management was sponsored directly. I attended that. The other major issues were that RCA had a magazine, which is called the *Engineer*. Probably, the most important national technical magazine because it reflected only work that RCA was doing at the research center in Princeton. Most of the patents that RCA was obtaining, they were reflected in that magazine.

[00:16:23]

We have a few dozen, a couple dozen of those, at least, in here, the magazine. Those are very valuable for people that are interested in research with RCA. But, RCA in conjunction with that, David Sarnoff, the President of the company, the Chairman of the Board, created an award for people getting their PhD, excuse me, yes the PhD was one. The other one was, if they had an especially project was successful they named the whole team to win the Sarnoff award. Every year, I think around they was... this was encouragement to the whole class of people. It wasn't just pick out one or two and you... RCA in 1969 when we sent the man on the moon and the little guy on back and they carrying that package for the secure communication and Armstrong and the other gentleman they talked to from the moon to President Nixon and to the world, "A small step for man, a giant leap for mankind." Those were RCA words. Not RCA words, RCA technology in the making that started the talk from the moon. That was created in Camden. They landed on the moon because RCA had that package of communication. The world became aware that this was happening because RCA had done that. After that, in '69 and '70 a whole many other projects that's diverse, RCA started to diversify. Records went into Indianapolis, and television and so on. But, they all of sudden was an

appellative, a name, when the name start to come up and say, "RCA, the most trusted name in electronics."

[00:18:23]

They didn't create it. They didn't invent it. Somehow it surfaced and it was accepted, no criticism. I use it all the time in a brochure here I use for other reasons, here. So, these are the elements, which made RCA a company. That had not only ideas, serious consideration for what was worth for the nation and for the population where they were working, Camden, South Jersey. So, that's why when RCA disappeared many people were disappointed. I became one of them. It took me a few years but eventually, I started this idea of developing RCA's name and legacy again. That's what this is, The RCA Heritage program something that I created and I come to Rowan and fortunately, the president, they got a hold of the idea and bought me to lunch and here we are almost 4 years later. That was September, 2011. So, I'm honored to be on, by any means, that Jim and I have been working on this project here. You working on this project and other people working on the project. So, that's why RCA even... the change stopped all that. The fact that they keep selling the divisions to other companies. Nonetheless, those people who went from RCA to Lockheed and said, "Fortunately, they stay at the same desk, same telephone number." So they never left RCA mentally.

[00:20:22]

Well, Jim thinks he was born at RCA. No, he was all these 12 years, but it's been 37 years, 25 outside. But, there you go, there, the concept of family. Even to think about that is unusual, but it is true. These are human beings. These are engineers, professionals, you know they think in those terms. I, you know, I remember that and I think that's pretty good stage in my life that I can really enjoy this opportunity.

[00:21:04] Female Speaker:

So, to sum everything up can you sum up your career overall at RCA and what you remember most?

[00:21:11] Joseph Pane:

My career at RCA?

[00:21:13] Female Speaker:

Mm-hmm.

[00:21:17] Joseph Pane:

Well, yeah. RCA had a structure. First level manager, which they call leader and then so on and so forth. I became a leader. I was here about... I was a senior engineer when I was hired. A project engineer and I think within a year or so I became a leader then I became a manager. Then... but this were opportunities because we in Camden, we had about 300 projects from \$50,000 to \$50,000,000 or more. So, a young

engineer coming there the opportunity to search, maybe I want to work on tape recorders maybe I want to work on some other project. This was a... no other company had lot of opportunity, at least around the East Coast. So, having that alone induced me to endeavor to do the best I could to get into the management structure and I did. From engineer I went to the program management, which it means managing programs from the viewpoint of dealing with the customer, bringing them in, producing the equipment, the shipment and so on. Basically, a small business aspect over the whole company. Then after that I grew more interested in creating the GVP, Government Volume Production, I mentioned to you before. So, a tremendous reward for a low immigrant with an accent, you know. I thought that was pretty good.

[00:23:08] Female Speaker:

Can you touch on your supervisors and co-workers you had along the way, a little bit?

[00:23:09] Joseph Pane:

Oh, yes. Oh, yes. Yes, yes, yes. At the beginning the AUTODIN was a group of about 150 people, maybe 70 engineers, marketing and all that. Our manager was a gentleman named Anthony, Tony Giannetta. A very good man, very good guy, quiet. The idea... his idea of management was to have a meeting, but also recognizing that some of the senior people were essential to help the young guy that just come in. They created this position in engineering, double A, which are the highest level of technical you had to have in order to be part of that. That's pretty good because they were making the equivalent money over manager. That's how well they were treated. I became one a few years. From that it grew up that the program manger or was it became vice president was Osborne, Jim Osborne and he began to use his own way of doing it. But it was always rewarding in the sense that you had a place. You know where you were. Oh, yes, there were disappointments and this and that, naturally, but the idea, if you keep looking forward and say next year I want to be there. I want to try to do my best. You just work. Maybe work, maybe you'll win, maybe you'll lose, but in my case, I had more wins than losses. I'm very happy the way it ended. I became a vice president of RCA. That's pretty good. I think.

[00:25:16] Female Speaker:

Did you have any co-workers that you had any specific memories about?

[00:25:20] Joseph Pane:

Oh, yeah, oh, yeah, oh, yeah. There's a lot of them. One is called Jim Fayer. We were about the same. He joined the RCA

a couple of years before. He started from the shop and then he went to engineering at Drexel. We became friends immediately. His family was close to my family. We used to go to one day trips and things like that. Jim became a chief engineer, over 600 engineers that reported to him. A very good position. So, we're still friends. He lives in Florida. Most of the time with him. Bob Chan, probably one of the smartest engineers I have ever met in my life. He became manager of engineer. They never gave him the title. I think he deserved it more than anyone else, but they never did that. We're still friends. We still have lunch. We're a group of five or six for 20 years. Then it became five, four, three, now it's just Jim, Bob Chan and I and we go to a Chinese restaurant. He's Chinese so we got to a Chinese restaurant, which is alright. That's fine. There were others that became friends socially. Go out for dinner once in a while. I can name names, but yes, it was a part of... the structure lended itself to be close to your people and to the people on the other levels of management or even in other divisions. Other divisions, we used to exchange people during the time when we're bidding on major proposals. They would be invited by us to come there to create a red team. Meaning to read the specifications, see if...

[00:27:24]

our reply was really sufficient, good enough to what the government had asked. We always had a government pro contract or something like that. So that created a rapport with these people. We had in Camden, we had a very good cafeteria, so that was another good reason to meet. Then we would go to the Nipper whenever there was a luncheon we go to that side. So, yes, it was a... it still is.

[00:27:53] Female Speaker:

Can you talk about RCA's impact on South Jersey, overall, just a little bit?

[00:27:59] Joseph Pane:

Well, RCA started in 1919. October, 1919 and quickly became a major broadcaster company, that's what. The reason was that during WWI there was an interpreter in war. An Italian, Marconi, who created the wireless communications. During the war, the first world war he made his fortune here. A company here in New Jersey and one in England. So, immediately after that, under the Secretary of the Navy, Mr. Roosevelt, Delano Roosevelt, that would become a vice president eventually. The vice president said, GE form company to buy all the patents that Marconi has so we own them here and we produce the equipment. Sure enough they did. That was in 1919 just right after the war, the first war

ended in 1918. So, GE had the package of new ideas and things like that. The beauty of that was that they were supported by General Electric, which was a major company. Westinghouse and whoever else on the investment. So they start to do design on this equipment. However, the product was done by GE and Westinghouse, they're producing it until 1935. Eventually in 1935 RCA had announced the production facility in Camden. Since then they expanded design, people, and so on.

[00:29:55]

Their participation in the social aspect, it wasn't just once in a while giving a party, a picnic for a few of the employees. It was all year around. Meaning that RCA had open houses. When there's an open house it means the family of the employees can go and visit that. You should see it, half the town would go there. Maybe they didn't understand very much the technical stuff that they see. But it was major, major contributor to the RCA commitment to this kind of actions, which were unusual. So they enjoyed it. One thing that struck me in working for RCA was that if you had a neighbor who didn't work for RCA and you just all of sudden just go, "Oh, you work for RCA, that's a good company." So that in itself was a value assigned to the company by strangers just because you were working for them. You, you think you're a pretty guy in that you work for the company. So, they had this good name, even with the unions, a strike lasted a day or two, that kind of thing. We had a very good rapport, very good relation. It grew to over 60,000 people, the whole company. The division in Ohio doing ships. Indianapolis doing the television and what's called the disc, the video disc. In Boston they're doing test equipment. In Morristown doing the TIROS satellites. The biggest one was right here in Morristown, which became the supplier of the American Navy over the launching and controlling program for all the frigates and the ships.

[00:31:59]

We have a cup that says how many there were. Now, that is owned by Lockheed. Another company, a very good company, things like that. So, these were all born here. All of sudden there's a group that's doing well. They started a little nucleus, six months they grow here, then a year and a half later they find a room in Boston. So, from now you built test equipment for the army, that kind of thing. So, it was the maintenance, rather than scattering all this management across the company, which they could have. May people do. They retained the nucleus in Camden, which was the focus, the dedicated. See the people in Camden worked 45 years. Well,

you saw it, they had a little thing. Forty-Five years in Camden. Some of them, they never went to Moorestown, just strictly in Camden, and their children. Having seen the husband and wife working there and a couple of their children is nothing unusual. This was when RCA invited them. They say, "Bring your family to work here." It worked. My secretary's husband was a manager in manufacturing. I hired their daughter in software engineer, brilliant. Their son was going to Washington University and I would hire him for the summer to work in the stock room. Not unusual to see this. Jim will probably tell you more on that. A good company, good name. If we revive it a little bit, we're doing okay. I like that.

[END OF TRANSCRIPT]