Intro: This is the end of January 2007. We're in Las Vegas and we're talking with Chuck Shreves as part of the Colorado River Board Oral History Project. Chuck, thanks for providing the time and sitting down with us and looking forward to you talking about your background with the Imperial Irrigation District. Before we go there though, let's talk for a few minutes about how you got to Imperial. I believe you're retired military, I'm not sure about that, but let's talk about the years that you spent prior to IID and how you wound up there.

Well, I got a call from a lady named Marilyn Simcox (sp??) who was working A: for Hinedrian Struggles out of L.A. She had been hired by the IID Board to do a search for a new General Manager. And so with this, she asked me if I'd be willing to send her a resume. At the time I was in Chicago. I was the Deputy Division Commander for North Central Division of the Corp of Engineers. An organization of about thirty-five hundred people, mostly civilians, there were about fifteen of us who wore "green suits" - were military. I was an Army Full Colonel. Our area went from Buffalo, New York down to almost St. Louis back up to North Dakota. So we had five engineer districts in there. We were operating the Great Lakes and the Mississippi River and some of the stuff on the border with Canada. But anyway, I said well OK. What is Imperial Irrigation District? And so I had the encyclopedia and looked it up. But I thought well, gee it sounds interesting. I was thinking about getting out of the military because I had completed more than thirty years. You can stay longer than thirty because I had been commissioned when I was only twenty years old. Your commissioning time doesn't start until you're twenty-one and I had enlisted time too. So my enlisted time because I had gone to Officer's Candidate School didn't count. So I could've stayed another, oh, two, three more years if I'd wanted to stay in the Army longer. But I thought well, this sounds like an opportunity where I could maybe be the person in charge and trying to do my own, because I didn't want to go to work for some twenty-nine year old PHD someplace as an engineer. I did have and do have a professional engineering license. I had graduated from Arizona State University so I like the West. Being in Chicago, it was colder than the blazes at that time. So it was September of '93, excuse me '83, September of '83, when she called me. So I said okay, I met her there at a hotel in Chicago, one right at the airport, as a matter of fact. She told me that she was interviewing several people. She had gone all the way across the United States and she had about seventy people she was suppose to be interviewing. And so, I thought well, gee that's interesting, but, oh well, I'll spend the time. She went back to the Board with twelve people. The Board then decided to interview five and I was one of the five they interviewed and I was the first one they interview. So with the interview I thought well, it's the end of that, but it was an interesting day. So I got a call a little bit later, "How about sending us twelve references, four

superiors, four contemporaries, and four subordinates." Golly, so I sent them twelve and Marilyn Simcox came back to me and said, "You know I've been doing this for twenty years and that's the first time all twelve of them didn't have something bad to say about you." I said, "Well, I guess I picked the right ones, didn't I." So the Board then made me an offer and I decided I'd take the offer. I started to work on the 13th of February, 1984. And so then I stayed there for ten and a half years. I left there in August 19th of '94.

- Q: If you started in February the weather in that part of the world was sort of mild. How did you react to your first summer in El Centro?
- A: It wasn't that bad. It was kind of warm. I didn't really have any true difficultly with it because when I went outside I wore my sunglasses and a hat. I did go around looking at lots of things. I remember one of the first questions the Board asked me when I was being interviewed finally. "What's the first thing you would do if we were to hire you?" I said,"Well, I would probably go rent a helicopter and fly over this entire area, because it is so vast. I'd like to see it all and have an appreciation for what I have gotten myself in." Okay, so I did. That was interesting. I also had a farmer offer to let me use his airplane and he flew me down across, just remember this is the time in 1984, that we still had heavy flooding from the Colorado River. You had all that heavy water flowing. So we went out to look at the Colorado River and went down into Mexico and to follow it all the way through. It was one mile, or a mile and a half wide. There was all sorts of water. Didn't look like a problem to me for a drought, for water problems because they were talking about IID being a water waster and everything. From there I went back to the organization. I met with all the staff and found out they had never had a staff meeting before. They didn't know. What's a staff meeting? So it was kind of interesting doing lots of things and finding out that IID was sort of antiquated. They didn't have a lot of sophistication as far as systems, equipment. I asked how about putting me on a truck with a zanharrow to make a water run. Okay we can. So they put me in a little Datsun pick-up truck that had a bad clutch and just bounced my butt up and down the canal bank. I did that for most of a day and decided first of all we need better equipment. We need more trucks. Get rid of these little Datsun trucks and get some Chevrolet trucks. So I convinced the Board to let me buy one hundred Chevy trucks. So they did it and the zanharrows loved me because of it. Then we went into maintenance systems and we looked around at the various facilities and tried to improve things as we went along. It was an interesting time for me. I did lots of various programs. I made lots of speeches. I started off . . . I met Carl Bronca though, the first month, the second month I was there, in April of '84.

Q: And Carl was...

- A: Carl was the General Manager of the Metropolitan Water District and one of the main issues that the Board wanted me to get involved with was trying to see about the possibility of transferring "welling water", at that time we called it selling water to MWD. So we started off a whole series of discussions. Then the board members would go with me and we would meet. From their point of view, I was accompanying them which was fine, but Carl and I did most of the talking. We had some representatives there also who came in from San Diego as well as from MWD in part of those discussions, which was an interesting program, which finally ended up with us agreeing that though MWD did not want to purchase water Carl agreed that he, they would fund projects that would conserve water if they got the water. That became agreeable, so we came up with a water conservation plan as to how we could conserve the water. It was kind sort of interesting tying it all together. Let's see, Bob Schemp was with him too. Bob Schemp, good engineer, good job. Actually Bob's degree, I think was in math, but he did have a professional engineering license. Initially when I started talking about automation because remember I had been with the Corp and with the Corp of Engineers it's very sophisticated. The way we did things by comparison that's why I could make the comment that I thought they were a little bit antiquated because they didn't have the sophistication of the Army Corp of Engineers. Remember they were mostly all civilians anyway with the use civil work side of the Corp of Engineers. So with that when I wanted to do things like automation. Get rid of the types of gates that we had, put in steel gates. Tie them in with wireless SCADA systems and operate the entire system. Bob Schemp kind of looked at me strangely saying, "Well does IID really have the capability of doing this?" Well we had been into this thing about two years by this time and so we'd been working also on the Power Department and with the Power Department, Hank ??10:00 did a good job with the Power Department. Hank would come in with various ways of his system.
- Q: He was one of your staff members?
- A: He was head of the Power Department for Imperial Irrigation District, I should have mentioned that. But we had installed this automation with the Power Department because they had more money the Power Department. It was interesting to compare the Board's reactions with water and power. The Board was mostly interested in water because they were mostly farmers. So I'd go in to ask for say, a heavy duty chair for the people who were sitting 24-hours at the Water Department trying to operate things. They'd say you want a steel-cased chair that cost five-hundred dollars for a guy to sit there? I'd say, "Yeah, but some of these guys weigh 250 to 300 pounds and they're changing around and all." Well, you don't need a chair that good. But then I'd go in and ask for something for the Power Department, something that was several million dollars, oh yeah, approved right away. So it was sort of interesting, I would have to change my approach from time to time in dealing with the Board. Taking Schemp down to the Operations Center of the Power Department to show him the automation that we had put in, I'll

never forget his comment because he said, "Gosh, this is quite sophisticated. I didn't realize you guys had this. This is a better system than I've got in MWD to control it." I said, 'Well this is what I'm saying we can get together the expertise. We can bring in the right people and we wanted to use UMA Engineering out of Canada and gee that was interesting too. We got them to agree for us to use UMA and so we put together the program as far as the types of equipment and everything we would use. About this time, I was also making lots of presentations to associations, Colorado River Board, the Colorado River Users Association, AQUA, AWWA, the PWA - Public Works Association, California Irrigation Institute and I was a member of several of these organizations. Then three times I had to appear before Congressional Committees who were involved in trying to see why we were wasting water, as they called it. We never agreed to the fact of the word waste. So I would be making presentations to explain our program. We had also developed a complete study program of how, all the things that we could do. I remember that in California, the State Water Resource Control Board, they were deciding to hold hearings and to look at the programs that people had developed. They held up one and said,"Everyone should have a program like this." When they zoomed in on it that was my program they were holding up. So I thought well okay we're making progress. Going before George Miller, the famous California Congressman who liked to get involved in water issues was fun. I remember a little humor here, because he wasn't paying a bit of attention to what I . . . he was all taking . . . and I stopped. He looked back up at me and I said, "Sir, I never thought I'd see the day that Congressman George Miller would pay no attention to the little man and he instead would give all his attention to Metropolitan Water District." He came back at me and he said, "Mr. Shreves, let me assure you that when I was a kid and growing up in Northern California that if I ever mentioned MWD at the dinner table I went to bed without my supper." But he paid attention from then on to what I had to say. I also appeared before Senator Bradley's committee and also before the House Committee on Water and Power Resources. So it was sort of interesting times trying to put all that stuff together. Anyway the contract was signed in December of '89 and the transfer was for a hundred and six thousand, one hundred and ten acre feet of water.

- Q: We're talking about now what has come to be known as IID One. Is that correct?
- A: That's correct, that's correct. Now see, the other things that have happened after I left I really don't have detailed information about, but everything up to that time I did know quite well. These were improvements to the system for concrete lining, reservoirs, and interceptor canals. Now interceptor canals is an interesting one because when you have the water that flows in, remember you've got sixteen hundred miles of delivery canals and then it goes from there on to the farmer's fields. So as it goes across the fields then you have headache. We had a tail water box and a tail water box, we had a program whereby if a farmer had up to 15%, more than 15% of the water that had been delivered to his field going through the tail water box, which meant it was going out to drain and going from there into

the Sultan Sea that he would be fined up to three times as much as he paid for the water. So an interceptor canal then was one where you could take the water and put it back into the system where instead of going through the tail water box it would then go into the system and be could be re-routed back to the head of his field and use that same water over again. It was a good concept. We changed also; one time when I went there, we had what was called a 24 hour delivery system. Now I'm sure you know that from the dam, Hoover Dam down to the, by the time the water gets to the Imperial Irrigation District five days have gone by. So we have to order our water five days in advance. If there is a rainstorm that comes up or something there's going to be a lot of water wasted because you're going to have to cancel your orders. Then farmer's at times said, "I don't really need 24 hours of water. That's why I have water going through my tail water box." So we went to a 12 hour delivery and they, a lot of them really liked that. We changed our gates from regular gates that we had there before to un-leak gates by building in concrete with rubber gaskets with a steel gate that went down there and then we automated the darn thing so you could control it. Now one of the projects that I had a little difficultly convincing Carl to do, but he finally agreed, was to help us build a complete new water operations center, a new building. Gee, what for? Well, because we needed the new sophisticated controls, the new computers, and the wireless system to operate the gates to control the system. He agreed with me finally to do that and that was probably one of the best things we ever did. There're good videos in IID on the operation of it. I don't know if you've ever been there or not, but they put on a good show explaining how the whole system works. One of the difficulties probably in trying to get all this done is there so many entrepreneurs in the area who wanted to sell water. They wanted to help IID sell water. Well the water belongs to the people of valley and is held in trust by the Board of Directors. It's not there to be sold. An entrepreneur who I will name, by the name of Tom Havens out of Colorado Springs, he had gone to Parsons Engineering out of Northern California. The president by the name of Leonard had convinced him that they could make lots of money by working with IID and selling IID water. Well, Tom Havens, a nice smooth talking guy and was able to convince some of our Board Members to go up to San Francisco and meet with President Leonard of the company of Parsons and see what could possibly be done. Well, Tom Havens was just a little too slick for me and so I didn't really enjoy working with him. That's the only one person I would say that about. He did manage to do some other things. Later on there was an issue with the Bass brothers and the Bass brothers out of Texas, very wealthy family. They had decided they wanted to come in and buy land in Imperial Valley and sell water. I was trying to convince the Board that this was not a good idea and they should not have anything to do with them. That's one of the things the Board and I disagreed on completely.

- Q: Well, the Bass brothers eventually did purchase...
- A: Thirty thousand acres, thirty thousand acres and then they sold it back over time I understand. Well anyway back in 1992, things were going pretty well. We were

working on projects and we were getting things accomplished. On 22, December, 1992 I was sitting in the office, people were on vacation, everybody for Christmas and all that and I got a fax. In fact, I was the only one in the office at the time and I got a fax from EPA. You are declared a public drinking water system subject to the rules of EPA. Within the next five days, they had all sort of rules and things I had to accomplish. I had to notify everybody in the area. Now to give you a little bit of background, some of the farmers lived in the city, one of the cities. Remember we had seven cities up there that we were working with. They would go out to their farms and check on their crops. But there were a lot of them who had started out with their six hundred and forty acres and they had a little farmhouse there and they'd operate it. They took the water and they would run it through their own system. They would put it into a cistern and they would go from that one into a different cistern and let it settle through sand filters and they would then move it into their house and some of it would have it chilled and they'd run it though like a swimming pool filter in addition. But they would use this water in addition to things that were okay. They would flush their toilets. They could take showers. They could do other stuff with it, but they were not supposed to be drinking it. We had told them that. Some of them did. So EPA had sent some people out there and looked and they found some farmhouses that were doing that. Therefore they gave us this very difficult ruling as to what all the things we were suppose to do. Well, recognizing the EPA has control over piped water systems and not really authority over open water canals, we filed an appeal with the Ninth Circuit Court in California. We appeared before the court. It took a long time. One of the most interesting things I recall about the attorney who was speaking for the EPA said, because the question came up you do not have control over us because we're not a pipe water system. He said, "But your Honor as music is piped to your ear, so is the water in Imperial Valley piped to those houses." The Judge said, "You know I think you're kind of making a little stretch there." (Laughing) I thought it was a kind of humorous, but as we walked out of that meeting we overheard the EPA guys say, "Well as soon as we get this one wrapped up with IID we're going to go after Westlands and about thirty others in California." So the ruling came down that EPA did not have control over us and so IID was looking very good in the State of California as far as the other irrigation districts were concerned. There were a lot more requests to have more presentations and speeches and all that sort of thing. So that in a nutshell, is taking twelve and a half years and being the General Manager and trying to improve all sorts of things. I was trying to improve education of the people.

- Q: You mean of the staff?
- A: Of my staff, I was trying to improve the education of my staff. I was involved in various committees with the locals. I made presentations to the local Rotary Club, the Kiwanis, everyone who wanted one, even the Masons. They had me down there twice to make presentations to them. So it was a public affairs type operation a lot and a lot of my job just had to do with that. I even managed with

one of my staff members, by the name of Bob Lange, a very, very fine young engineer who wanted to get a PHD. I said, "Well, maybe I can make a contract with you. If I can send you to school for two years, you come back and you work for us a minimum of two years, here with PHD and put all that expertise to work." He said, "Well, that would be great." I went to the Board and asked them and they said okay. We're willing to do that. And so they did that and Bob Lange came back and he did made significant contributions to the district, but after two years he left which ruined my program. The next person I was planning on sending was Jesse Silva, because Jesse Silva, a great, great guy and Jesse has a professional engineering license, but Jesse never finished college. He had been a surveyor and he collected all the engineering he needed to become a professional engineer through his surveying and being around all the programs. He knew the district inside out. He knew all the water systems and everything. Just like I was thoroughly impressed when I first went there with Bob Wilson, who was the head of the water department at the time. Bob Wilson could tell you which tree stood at the corner of which lateral. Remember there's three thousand miles of this system altogether with the delivery system, as well as the drainage systems and then the water that goes out to the Sultan Sea. Another thing I would like to make to the point, there's always the question of water around the Sultan Sea and we did get accused of flooding for some of the homes up in the Sultan Sea. In fact, we paid out fourteen million dollars to settle some of those claims.

- Q: Was that the Elmore Suit, what came to be known as the Elmore Suit?
- A: No, this was just the ones around the Sultan Sea. There were also other suits with Elmore, but this one for the Sultan Sea was a little bit different. What I wanted to explain was underneath the irrigated fields they had corrugated pipes, plastic pipes about twelve inches in diameter, perforated. These things were probably about fifty feet apart and run down through the fields and there were several thousand miles of these things. The water coming in to Imperial was six to eight hundred parts per million of salt, salinity. Seven hundred and thirty five parts per million is one ton of salt. So it was like a ton of salt when it came in and by the time it went through the fields went down, went out the drains, went in to the drains that went up to the Sultan Sea it was over three thousand parts per million going in. So you had, oh, four or five tons of salt going in there with each acre-foot of water. And so that's why the Sultan Sea was so salinity, it was over forty thousand parts per million at the time. I don't know what it is now because I haven't checked on it, but it's probably more than that. Then there's been a lot of other studies going on, some I was involved initially. It was trying to control the salinity up there. The fish were dying. Every year there seems to be a big kill-off of fish in the Sultan Sea and it would stink something terrible for a while until it was cleaned up.

One of the points, I guess I probably left off in our discussions with MWD, was after we initially had, we thought an agreement with MWD, we went to an Aqua Meeting and there Tom Lee, the head, and Jerry Shuf?? (28:45) walk around to Carl and

me and gave us each a subpoena saying that we were being sued because at Coachella we had not taken, adequately provided for their welfare. No, we were giving Coachella's opportunity to use water.

- Q: Okay we need to identify a Tom...
- A: Tom Lee is the General Manager of Coachella Valley Water District. Tom, like Carl, I have a very professional relationship with, I did have then and I still do. As a matter of fact, when I, digress just a bit a moment to the Colorado River Water User's Association, which I am Chairman of Housing and Arrangements and have been for the last twelve years, Tom is my committee and I've worked with Tom a lot. And I am on his committee for Audit for the Colorado River Water User's Association, also. But anyway, so Tom and I always got along well but we harassed each other big time when we got on the platform, engaged in making presentations. He would say bad about Imperial Irrigation District and I would say bad things about Coachella Valley Water District, but it was never anything personal (laughing), the same thing with Carl Bronca (29:55). So it's interesting to go through life and realize that although you have differences of opinions and you're each stating what is best for your organization that you can do so without really having a strong dislike for each other.

So, but anyway, back to my Sultan Sea, with paying off flooding and then we also had a problem with the Indians up there and then had to pay off some Indian claims because the Indians were saying that we were flooding their land also and that they had been there first before the Sultan Sea had gone up so high. If you drive around the Sultan Sea today you can see where it was much higher back when they had the floods of 1905, 1906. From those floods there is still a "bathroom" ring in various areas to show how high the water really was. By comparison today, it's not that bad but we did several things to try to consider how to control the sea. I remember my first year in IID and again it was based on my experiences in the Corp of Engineers and the dredging on the Mississippi River, I knew where there were places that built dredges and you could get them in all different sizes. I took Bob Wilson, again who was my Chief of the Water Department and Jesse Silva who was the Chief Engineer with me down to, I think in was New Lans ??? (31:25) where we went into this place where they had all the dredges and got a demonstration on how to do it. My idea was to go in and dredge a lot of the silt and everything around the Sultan Sea. Dredge it out to make room for additional water in the Sultan Sea. They both fell in love with the idea. We went back to the Board and the Board said no, no we're not going to do that. We're not going to go buy this dredge equipment because you're going to have to operate it twenty-four hours a day for about three years in order to really get it down to where you needed to have an adequate base of water. Then there was the problem of what to do with all the material you had dredged out and where to take it. So we needed places to put it. By the same token, no with environmental problems being what they are we don't want to do that. I understand there's still

- some discussion of the possibility of doing that sort of thing today although I first brought it up at that time. Oh shucks, I've been going on here.
- Q: Well, let me take you back for just a minute if I can Chuck, early on you discussed your conversation with Carl Bronca (32:38) at Metropolitan Water District and your Board, you used the word sell water and you indicated that Carl didn't actually want to buy water as a commodity but rather wanted to pay for conservation methods to save that water.
- A: Right. This probably took three or four years and we came up with that, but anyway, yes.
- Q: But I would think, I would think that many people would have thought that those philosophies would have been exactly the reverse. That Carl or Metropolitan would have just wanted to buy water and that Imperial Irrigation District because there is a general philosophy in word that fallowing is not something that's going to happen in Imperial. What you're describing sounds like it's one-hundred and eighty degrees out of sync of what most people would think at the time. So I guess the question is, at that time, and we're talking 1984, '85, '86 in that range, was your Board interested in actually selling water and if they were, where were they going to get it? Were they going to buy land and fallow it or, and the only reason I bring it up because fallowing became somewhat of an anathema (34:00) to the IID Board at some time.
- Well, it's very true. Actually see, Metropolitan also was working with Palo Verde A: Irrigation District at the same time and they gave the program to them that they would pay the farmers that if they were to need the water, the farmer would then fallow his land and they would get the water and for that they paid the farmer directly for the amount of, for the use of his water. That was another one of the issues that had been discussed with us. But our farmers didn't seem to think they liked the idea and they didn't like the idea of fallowing. At the time we didn't have all the various ideas of how to conserve water. We together, our staff and Parsons Engineering, Melvin Brown was from Parsons, good engineer. The interesting thing, if I can digress again a moment, when I left the Corp of Engineers, the Chief of Engineers was a Lieutenant General, Joe Bratton, B-R-A-T-T-O-N. General Joe Bratton, as a matter of fact, his signature is on one of my Legions of Merit from the Corp of Engineers, but they, Tom Havens, bless his soul, he had convinced President Leonard to hire Joe Bratton. Joe Bratton, because that way they could come down and straighten me up, because Joe Bratton had been my boss as a three star, but Joe Bratton and Mel Brown came down, they were working for me and I made that point perfectly clear. Joe Bratton changed very well and he accepted the fact that he worked for me and he and Mel Brown did a lot of good engineering studies for us as long as you could keep Tom Havens out of the mix. The only one guy that I really never did like and I'm willing to say that again.

But back to the fallowing issue, once we had all the various projects listed and how much water we could save with each of them, then it wasn't as difficult to sell. Although there were still people, and the farmers and you'd meet with the communities and we did. We had lots of meetings. We'd have public meetings and people would stand up and tell us how bad we were for trying to sell their water or get rid of their water, because this is our heritage. A lot of them their grandfathers and great-grandfathers had gone into the valley back at the start of the 20th century back in the early 1900's and so they felt very strong that this was the way it should be. That nobody should interfere with them. That we were entitled to the water because we, the third priority on the water... First priority comes from Palo Verde, then there's twenty-five thousand acres of Indian land in the Yuma area and then comes IID and Coachella out of the Arizona vs. California case. So Coachella's water was subordinate to ours, their priority was subordinate with ours. Tom Levy tells a good story on that one. I hope you're going to do this with Tom Levy, if you haven't already, because he will tell it a little bit different. The interesting thing is Tom states that they were told that if they didn't subordinate themselves to IID as far as the water, that they wouldn't be getting the Coachella branch of the All American Canal. They agreed to do that. So that's always been a bone of contention between Coachella and IID that although there's 3.85 million acre feet of water available that Coachella had to take a subordinate position to IID. But they were never ever shorted water, even with their seventy golf courses at that time and they probably got a hundred and ten by now. I don't know (laughing). It's a beautiful area up there, the Coachella Valley and so they have a lot of dates and a lot of crops and everything too, but nothing compared to the 450 to 500 thousand acres of crops you that have in Imperial Valley. It's just a big, big area. We had the power; we served the power to all of Imperial Valley and to parts of Coachella Valley up to Riverside County. So we had a big area, a vast area that we were providing power and water to.

- Q: By the time you retired from Imperial and that would have been around 1995...
- A: No, actually I retired in August of 1994.
- Q: '94, okay.
- A: And I moved to Peer in November of '94 and because Tom Maddix, who was the President and CEO of Boyle Engineering and who had been to many conferences with me and listened to presentations that I had made, asked me if I would take over his Las Vegas office. Now Boyle had twenty-two offices around the nation. This was one of their twenty-two offices and I agreed to come up here and so that's how I ended up in Las Vegas as the Manager of Boyle Engineering Office. Here we did a lot of local projects just getting into the area as far a convincing people that you were able and capable of getting things accomplished was kind of

interesting. We were working with the Southern Nevada Authority at the time. We got some really good projects, some big pumping stations. We made a lot of money for Boyle Engineering those first few years then it became more difficult to get big projects.

Well, I really digressed. I started working when I was ten years old. I was a caddy on a golf course and I was also carrying newspapers. When I was seventeen I graduated from high school. I worked as a carpenter apprentice for two years and I then went in to the Army. The Korean War was still going on and I was going to get drafted and I wanted to go in on my own and so I went in as an infantryman, regular Army, unassigned. Then I went to Officer's Candidate School, graduated from the Engineer Officer's Candidate School. We had fifty-two people start and we had sixteen of us, original who graduated, because the Korean War had just ended. So then my first assignment, my first company in Austria, I was with a company with two of the very best of my contemporaries, the number one and the number three men from West Point in that same year, Marion Frank Metter and Dick Farmer. So I got to looking at that and saying gee you know these guys are fantastic as far as their education and background and everything goes. And here I am a dumb high school graduate from Cumberland, Maryland, back in the mountains. I'd better get to college. It took me seven years to get a bachelor's degree and then after I came out of Viet Nam and probably got credit for more than I deserved, the Chief of Engineers at the time, a General Cassiday, I was a Major then. He said, "I want that Major to have any job he wants because of what he's accomplished over here." So I said "I want to go to graduate school." And they said, "Oh yeah, why, the General said you can have any job you want at the Pentagon or the Chief's Office." I said, "No, no, no, I want to go to graduate school." "Where do you want to go?" "I want to go to Arizona State University." "Okay, you can go take your graduate of records exam." I said, "Okay, when can I take it?" Well this was a Monday and they just happen to have one down town in Saigon on Friday. "Okay, I'll go." So I took the graduate of records and I did quite well, ninety percentile. With that they said, "Okay I guess you're qualified to go to graduate school." I went from graduate school and I got the Professional Engineering License and so I was able to get better assignments, really good assignments with the Corp of Engineers. So that's how I ended up as an engineer and able to fulfill what I wanted to do from the very beginning. Again, I owe a lot of it to the fact that I worked with some of the very best people to start off with, the top graduates of West Point.

- Q: You went to the University of Arizona?
- A: Arizona State.
- Q: Arizona State, oh sorry.

- A: I'm a Sun Devil (laughing). I still have a ring, but I don't wear it.
- Q: Coming from Arizona State by the time you got to Imperial decades later, you knew what the desert is all about.
- A: Oh, I knew what the desert was all about.
- Q: I'm interested in you talking for just a minute or two about looking back on your career at Imperial, ten and a half years. You don't have to go into a lot of detail, if you don't want to, but it's your choice. What do you look back on? Your crowning achievements, two or three, or four of five, whatever the number is, the things you accomplished at Imperial that you are especially proud of?
- Well, at first I think it's the staff, the fact that I was able to hire some very fine A: people and we also improved the quality of a lot of the operations. To start off with an organization that had not had a staff meeting in years and didn't really know what to do at one. To set it up to then make all of the various presentations that I did make, I think those were things I will never forget. I remember that the staff wasn't so happy with the things that we were accomplishing and doing at the time. Funny story, but I guess I hadn't been there but about two, three weeks and my secretary, who later became an administrative assistant, but any way. She said, "I would like to show you the ladies room." What, I walked down the hallway with her and she went in and cleared everybody out. There were holes in the floor of the ladies room. It's an elevated building and no tile to amount to anything, really bad. She said, "We could step on a high heel here and break an ankle, twist an ankle." Good grief. So I immediately got people in there, got it all corrected, got it all tiled out. Changed out all the facilities and put in new mirrors and new toilets, the whole works for the ladies. They were really happy.

Another thing was, with the lack of sophistication, they had typewriters. I said, "What about computers? What about word processors?" "Well, no you just want to get rid of us. You just want to get rid of us so we don't have a job anymore." I said, "No, no I just want to improve the operations and teach you how to use them." "But we don't know how to do that." "Okay we hold classes, we'll buy them and we'll hold classes." So we got the computers for each of the various offices and we had several offices there and then again we had an office in each of these other seven cities. Then get all these ladies together and talk to them and I had to convince them that they should learn to use computers and should learn to get everything automated. But after three or four months if I'd tried to take it them away from them, they'd broken my arm because they were so happy with them and so happy to be learning. It took a while just teach simple things like that.

To show how bad it was in the garage outside where we did the maintenance of the vehicles, of course the heat of summer, that's pretty tough, but the restroom out there was open-air so the pigeons would fly over and drop on the people who were sitting there. No, no I built a building within a building. But these I mean are funny things that I just have to reflect back on, of things that why did the people really like what was going on. They liked it because we were improving their lot in life and teaching them and getting them some education and improving their normal operating facilities and all that. So those are things I remember the most as to how happy the people were.

- Q: Now you've stayed, since retiring you've already indicated, you've stayed pretty close to water, being active in Colorado River User's Association for one, working for Boyle and then working for, doing work for Southern Nevada Water Authority for Boyle Engineering. What's your reaction to what's going on in the Southwestern water community and I'll define that as Southern California, Arizona, Nevada, over the last five to six, or well now ten years since you retired? Are things progressing as you would like to see them progress if you were king of the water world? Or are there things out there that really should be done another way?
- A: Well, I tell you I am personally very proud of Pat Mulroy and what she has done. Remember she was the General Manager of Las Vegas Valley District and then the Southern Nevada Water Authority was formed because the great state of Nevada decided that there should be no fighting amongst the people within the area. The amount of water that they had would be equally distributed to each of them as per their needs and so they combined and put them altogether in the Southern Nevada Water Authority. With that they managed to get the Bureau of Reclamation to loan them one of their key people to run the Southern Nevada Water Authority for a period of year to try to get it put together. The bad about it is they didn't give them a staff so the staff that worked for Pat Mulroy for the Las Vegas Valley District was also the same staff for Southern Nevada Water Authority. So you had people serving two masters and that didn't work out very well. So Pat Mulroy then asked the Board to make her General Manager of both. Which she has became and she has handled it very well. She's a great spokesman for Nevada. I'm sure you have heard her speak many times. She has done well with that job and with trying to get things done for them. Now her deputy, David Donnelly was also, he's a good civil engineer, the only bad thing about him, he's a hokey from Virginia (laughing), but he loves it and he likes to talk about football, too. I've played golf with him several times. He has done a great job with them. He then retired but still works as a consultant and he's out working the water deals if you will, trying to move water from the north and all around. As far as what I could possibly change, I think Pat Mulroy and David Donnelly have as done as well as anybody could do and I don't think there's anything I could do to improve what they've done.

- Q: Okay. Chuck, we've talked to some degree about physical facilities. One of issues with respect to the, oh let's call it a lack of sophistication at Imperial when you went down there, was borrowing money, dealing with Wall Street, and bonding, was Imperial really up to snuff on how all that worked in the event they wanted to borrow money? Or was that an issue for you?
- Α: It was. We had a lady, a very fine lady who was, her name was Chris Fontaine who was in charge of the Finance and Accounting Department. Chris is a CPA, was a CPA at the time. Her father had worked for the district; in fact, as I recall he had one leg, a wooden one. So she grew up in the valley and had gone to San Diego University and had gotten her CPA, so she had some information and some knowledge about how things should be done. We also used Ashley Wood, from California, the San Francisco area. He came down to talk to us and tell us about what we needed to do, how to go about it. So we prepared booklets. I appeared before Standard and Poors in order to get bonding actions to fund, especially power department projects. I did that, oh at least three times. She would go along and sometimes with one of the directors, one or two of the directors, maybe would go along. They gave some discussions or pointed out the status of things in the valley. In fact, I've got videos of some of our presentations that we made there. I think I mentioned once before that when we made these videos Ron Hall who was the Public Information Officer for Imperial Irrigation District would give me a copy and say "Here, why don't you just keep a copy of this." And I did so I took them to my home and I still have them. I didn't mention Ron Hall. He's another good guy. Ron Hall had been the mayor of the city of El Centro when I went there. I was wanting to hire a Public Information Officer and put one together. I hired Ron Hall, but I said, "You can't be a politician as well, so you have to give up your job as mayor." And he did. And he did a great job. There's a couple other of people I worked with. Now I might mention the Board of Directors when I went there, John Benson and John Allen were the probably the two primary ones that interviewed me and everything. Leroy Edwards was from Hopeville, really a great, great man. Then the other two were Bill Conduit and Jerry Moore. Bill Conduit was the only democrat of the five and he made everybody know it. He was an interesting guy to work with and he stayed on the Board for a long time. In fact, they have named their auditorium after him since he spent close to twenty years I think on the Board before then beaten in an election by, oh gosh; I have to think for a second, the guy who was just beaten out...
- Q: Oh, Andy Horne?
- A: Andy Horne, thank you, thank you, thank you.
- Q: You're welcome.

A: I always enjoyed Andy. Andy lived about seventy-five yards or so away from where I lived. Andy could tell the funniest stories and do the strangest things (laughing). He wife one year for Christmas gave him a little cannon and he went out there and fired it off and killed all his neighbors chickens, but that was funny.

But then Leroy Edwards decided to retire after he was sixty-five. He was replaced on the Board by election by Lester Bournt from Hopeville. Lester is a real fine gentleman. He was a great hunter. He would go to Africa. He built a whole new addition onto his house and his had all the trophies that he had from Africa. It looked like a dog-gone museum in there with all his trophies. So he and I would shoot weapons a few times together. I liked Lester Bournt. Let's see, I'm trying to think who else....then Lester was beaten in an election by Ralph Mennville and I don't have much to tell you about Ralph Mennville. His brother John Pierre Mennville is currently on the Board of IID also. And John Pierre was always much easier to talk to than Ralph. I remember one time we were out there inspecting a canal. We were doing a concrete lining of a lateral. His parents probably passed away by now. His dad at the time was in his eighties and his mother too. She would always ask me "What do you mean by state-of-the-art?" Because of me wanting to get things to state-of-the-art, so I would explain it. She finally came back to me, she went and took a college course and came back and said, "Know I understand what you meant by state-of-the-art." The father, he was out there watching as we were pouring concrete lining and he says, "This will never work." I said, "Why not?" He says, "It's not big enough". He said, "The canal was so much bigger than when the water went through there. It'll never go through there." I said, "Yes sir it will". He said, "No." I said, "Where did you get your engineering degree?" I shouldn't have said that (laughing). Don't you mess with me young man. But anyway, later on he came back and said, "You were right, it worked."

Those were some of the key people that I worked with there as far as the District Board of Directors. I'm trying to think who else; John Benson was replaced by Don Cox.

- Q: Okay, well let's talk about Don. I'm going to stop this tape because we're right at the end and we'll put in a new tape and we'll pick up at Don Cox and then talk about some of the other people, not necessarily Board Members that you worked with over the years.
- A: Okay.
- Q: Okay, we're back. This is tape two. We're with Chuck Shreves. It's the end of January, 2007. Chuck, we're going to more or finish this off by talking very briefly about some of the people you worked with. We left you on the last tape with Don Cox as I recall. Just for anyone watching this video Don is the subject of an earlier

- oral history done and is on file at the Colorado River Board of California. So let's pick up then with Don Cox.
- A: Well, Don Cox had been a farmer there for many years. He was a graduate of the University of California. He played football there. He was a very knowledgeable farmer. He showed me his fields and crops and things many times. One of his friends would come to visit me from time to time. Don Cox, then when he got on the Board, he had his own ways about doing things. With that, we'd go to a Board meeting and the Board would vote on something four to one against Don Cox. Well Don Cox the next morning at seven o'clock would be in my office saying, "Don't pay any attention to them. You do it the way I want you to do it." And I'd say, "Sorry, Don I work for three votes. I can't do that." So he'd leave in a huff and I'd say, "Well, Don don't go away mad. Come back here and discuss it some more, but if you were in my position, you'd do it the same way." Don says, "Well, I guess so, but they just don't understand." Well, I say, "Okay Don, I'm sorry about that". He flew his own airplane. He flew me around from time to time at some of the various meetings. He went with me to the meetings. I remember we had one where we were trying to tie all seven states together with water issues. They were making comments; it seemed that all six states did nothing except bad mouth Imperial Irrigation District as a water.....

Tape ends abruptly