

T V FOR MOAPA VALLEY

By Val Smith
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I was born and raised in Pima, in the Gila Valley of Southeastern Arizona. When I was 20 years of age I decided to visit my brother Ruel Smith who was teaching school in Overton, Nevada. It was in September of 1947 and was only going to be a short two-week visit, but it lasted for 57+ years. While in Overton Mr. Seymour P. Fish, Superintendent of Education District #1 located in Overton needed a band teacher in the Logandale Elementary School. I had 2 years of Jr. College by then, and he asked if I might be interested in teaching on an hourly basis. Instead of returning home to Arizona, I decided to teach a couple of band classes there. I got a job at Jensen-Wells Texaco service station, and at Bill Cooper's Logandale Market. Now I was settled in the valley.

I decided I like teaching so I went to Reno to the University of Nevada to get my teaching certificate. While there I met and married my wife, and after receiving my teaching certificate was offered a job in Panaca, Nevada teaching music and 3rd and 4th grades. I stayed there 3 years. One day I received a call from Masako Winsor, Secretary to Mr. Fish in Overton. She indicated that it was time to come back to the valley. I was offered a teaching job in Logandale Elementary School again teaching music and 5th and 6th grades. I was running my own radio repair business, and had been for several years.

Since moving back to the valley with my family from Panaca in 1954, I had tried several ideas to receive television in the valley. I was living in Logandale at the time, and in 1955, I borrowed a TV from Garheim Music Co. in Las Vegas. I was doing quite a lot of business with them renting and buying musical instruments, being the band teacher in the Logandale Elementary School. I purchased a humongous TV antenna and mounted it on our house and proceeded to look for some station to show up. Las Vegas KLRJ Channel 2 had recently come on the air but I received their signal only spotty and very snowy. Often I would get skip signals out of Texas or Kansas or some state in the mid-west and we could watch some, or maybe all of a program. We were thrilled at this. I believe that this was the first television set that was in the Moapa Valley.

There were some attempts made in the 1950s about how to get a TV signal into the Moapa Valley. One attempt was by Verl Hickman and Dick Heath. I was not in on the construction, but I did see what they did. They constructed a large screen made of chicken wire supported by some long poles like a large mirror, and built it up on the Mesa above where the "M" is. The idea was to reflect TV signals off the screen down into the valley, and if one turned his antenna toward the screen, it would provide a signal. From all the information that I had known about this experiment, it didn't work. But I surely give them credit for their efforts.

In 1956 my interest was growing. I tried other antennas and other locations, but we live down in a hole in Moapa Valley and none of my attempts worked. I had my eye on the Beacon Hill for possibly a place to receive a signal. The road was rough and only went up to the saddle. One Saturday I took my Amateur Radio field strength meter and a homemade dipole antenna and went up on the hill. My meter would tune to 54 MHz, which is the video portion of channel 2. I got a good signal, but that was a long way from the people of the valley. While there, I noticed, that someone else had been doing some TV experimenting. There were several broken antennas and

aluminum rods scattered around. There was also a cardboard box with a Las Vegas address on it and phone number. I took this information home with me and several days later I called the number. It rang to a business called, "The House of Miracles." Two fellows owned the business; Blaine Bowman was one, and I have forgotten the other fellow's name. I introduced myself and told them what I had found out on the hill. They said they had been out there checking on TV signals too. I told them what I was attempting to do. I informed them that I owned and operated a radio repair business in Moapa Valley and was interested in getting a TV signal into the valley and branching into the TV business as well.

The fellows were very friendly and wanted the three of us to get together. I traveled to Las Vegas and met with them in their TV shop. We discussed the possibility of putting some kind of translator to "boost" the signal down into the valley. The possibilities were limited because this technology was just getting started. I had read about other towns in Nevada doing this same thing but there was not much information about it at this time. We surmised that we could put up a channel 2 receiving antenna, feed that into a TV tuner, then into an IF amplifier. We could then convert that signal to channel 4, and connect that to an antenna and beam channel 4 down to the valley. We were able to scrounge parts and come up with the stuff and put it all together. Power? Well, there was the beacon on top of the hill. Maybe we could "appropriate" some power from that.

On a Saturday in the fall of 1956 we took all the equipment up to the hill. We climbed from the saddle to the top of the hill where the beacon is. There was no road at this time. Everything had to be taken up the footpath. We were able to get into a power box and, as I said, "appropriate" some electricity. We laid the equipment out on the rocks and cabled it all together. It was out in the open subject to the elements. We mounted the big channel 2 antennas onto a 1" pipe and put rocks around the pipe to anchor it. We guyed it to other rocks so the wind wouldn't blow it away. We did that same with the channel 4 antenna. Now this was quite a site when we got through. We turned it on, and by golly, it worked! There was still a lot of tinkering and tuning to do, but it did work and we were on the way to accomplishing what we had set out to do. We were probably transmitting a total power output of 1/2 to 1 watt of radiated power at most.

Now, the fellows at House of Miracles also had an ulterior motive for all this. They knew that I had a radio repair business and they knew that I knew nearly all the people in the valley. They wanted to sell TVs. And, of course, so did I. Once we had a reliable signal coming from the hill, we negotiated with Bill & Elizabeth Metcalf of Metcalf Electronics in Las Vegas to supply us with TV sets. These were custom made sets that were well designed and were plug-in type replaceable units. If a part went bad, it was unplugged and another was plugged-in in its place while the original part was being repaired. These sets were way ahead of their time. I have not seen another like this in all my years of TV service. They were made by "Setchell-Carlson." Jesse and Alta Whipple of Logandale were the first of our customers to purchase one of these sets. We sold quite a few.

It doesn't take a rocket scientist to figure out that our design wasn't going to last long. The first rain that came, I was up on the hill with plastic trying to keep the moisture out of the equipment. I used a hair dryer to dry out the circuits. The trips upon the hill were becoming more frequent. Keeping the equipment on the air was becoming a real job. It was also becoming

expensive. Tubes had to be replaced. Gasoline had to be purchased. No one really thought of these things. The fellows at House of Miracles would send out some tube replacements, but they began to get a little harder to work with. Finally I spoke to a couple of the men that had purchased TV sets and proposed that we form some sort of organization. Wendell Hutchings and Lester Shurtliff were willing to work on a committee to see about raising some operational funds and were the first two committee members of record. We asked the TV owners to contribute \$1.00 per month to help in the up-keep of the translator. To you who are reading this, does this sound familiar? We were met with no great enthusiasm.

We struggled along with one channel for about 6 or 7 months. Improvements were made. Better amplifiers were added. The TV tuner gave way to a manufactured converter, and a metal box was added to somewhat protect the equipment from the weather. By now House of Miracles had closed up and the fellows had moved on. I never heard from them again. The technology in the translator field was growing by leaps and bounds. We had a TV organization. We were collecting some money, and had a few dollars in the bank.

A Couple of fellows from Salt Lake City sent us a letter inviting us to purchase some translators they were manufacturing. Some towns in northern Nevada were using them and we contacted them for a referral. They said they were giving them good service. The board agreed to purchase three units. By now, KLRJ had moved from channel 2 to channel 3 and was now KNBC, so we had to purchase new equipment. We added channel 8 and channel 13 to our list.

Most important to us was that the Overton Power District made a road to the top of the Beacon Hill. Now we could drive all the way to the top and didn't have to climb it on foot. They built a small building to house all their radio equipment. We approached them and asked that if we might contribute part of the cost of the building in exchange for room for our TV equipment. It was agreed that this would be OK. I don't remember the exact amount, but as near as I can remember, it was \$500.00. We installed our new translators in the building and Irvin Bryner brought his jackhammer up on the hill and drilled several holes for us to cement our receiving antennas and transmitting antennas. This really helped make things much better weather-wise.

The decision to purchase this new equipment became our darkest days of the TV District. We needed money to upgrade and add the new equipment. Our funds were depleted. As I recall, at one time we had \$2.89 in our bank account. The decision of the board to upgrade meant that we would have to borrow money to do it. I recall that two of our TV board members at this particular time were Lynn Bowler and Ron Dalley. There were others, but I don't recall who. These two board members personally signed a note at the bank to guarantee payment of the money we needed to purchase the equipment.

Along with the new equipment we erected an "H-Frame" at a receiving site down below and south of the tower so we could isolate our receiving antennas from our transmitting antennas. Donated labor from some good valley people, and pipe from Simplot Sand Company made this possible. Keith Henderson spent many hours of donated labor on this project welding the frame together. The Board decided to try to consolidate all of its transmitting antennas, so we built a windmill tower on top of the hill hoping that we could mount all of them in one place instead of having them all over the hill. We learned a good lesson. The antennas needed to be as isolated as

they could be, and by putting them on the windmill tower they fed their signals back to the receiving site too much. So the windmill tower was really never used for what it was intended.

The FCC now had gotten into the act and was making all the TV districts license their equipment. This became no small job either. Filling our Federal Forms, crossing all the T's and dotting all the I's took many hours of time and effort. Thanks to some good and smart and genuinely interested board members who took on these duties, we were able to keep ahead of the ever-growing requirements from the government bureaus. We also learned that there had to be a person who held an FCC license available to qualify to operate and maintain this equipment. Part of my college graduation requirement in electronics way back in 1947 was to pass and obtain at least a Third Class Radiotelephone License issued by the FCC. I passed my Second-Class. Now I found a use for my license. It was still in effect, and I have kept it current all these years.

We out-grew our space in the Power Company's building. The board decided to build their own building. They hired Robert Behmer to build a small brick building and we moved all of our equipment into it. With the addition of more equipment it wasn't long before we had to add on to that building too.

Solid-state equipment rapidly became available which dramatically changed the translator business. Even though the cost of equipment became more expensive, the quality became so much better. The Board attended a Consumer Electronics Show in Las Vegas where the translator manufacturers were showing their latest equipment. We were impressed with one company. We purchased equipment made by Emcee Missile Corporation. This was installed and gave us channel 5, the Fox Network. Along with Emcee equipment, there was a local person in Las Vegas who was their representative and installer. We became well acquainted with him and he gave us much valuable help with all of our other equipment later on through the years. His name was Herschel McKenzie, Or "Mack," as he preferred to be addressed. As our old vacuum tube equipment was replaced, other newer brands were purchased. Rodelco Corp. from New York came and replaced our two remaining tube type translators. The last, as I remember was by Television Technology.

Providing a signal for channel 8 has always been a problem. Our signal at Beacon Hill was not the greatest. I don't remember who lead us to a man by the name of Gar Johnson who owned a company that dealt in custom-made translators. He contacted the board and wanted to meet with us about our problem. He proposed that we set up a translator at Apex Mountain that looks right down on Las Vegas, receive ghost-free channel 8 there and send it to Beacon Hill by translator on channel 62. We would receive it, and convert it to channel 9. He convinced us that it would work great, so the board bought the idea. We had to build a building at Apex to house the translator. We again hired Robert Behmer to build the building. Mr. Johnson installed his equipment and sent the signal to Glendale. It wasn't much better than the signal we got off the air. His 20-watt UHF translator didn't put that great of a signal to the hill. He played with it for a few days and got it to work pretty well though. The board was satisfied and paid him off. Well, we had nothing but grief with the translator. It was unstable at the frequency it was operating at and had to be constantly retuned. It wasn't but a few days until we had to call him to come and service it. Getting up atop of Apex was no easy task. I could get there in a 4-wheel drive. Ivan Jones let me borrow his when I needed to go. The replacement UHF vacuum tube was an Eimac 3560. It cost about \$35.00 to replace. We were replacing one about every 2 months. It just became too hard to keep it on the air,

so about 10 months later we abandoned it and went back to the off-air signal that we got at Beacon Hill. Since we stopped using the building at Apex, the State Highway Department took it over. The building is still there. I probably shouldn't put this part of the history in here because this cost the board a lot of money for nothing.

For those who are too young to remember, color TV came of age in 1964. Our translators were able to translate color as well as black-and-white. The Setchell-Carlson TV sets we were selling were not color so I found a distributor in Salt Lake that sold RCA and Zenith and became a dealer for them. Adelia Shurtliff of Overton bought the first color TV in the valley. She purchased an RCA color TV. Neighbors gathered at her house on Sunday night to watch Bonanza.

Mesquite was providing two stations in the Virgin Valley out of Salt Lake. They were getting their signal from Utah Hill. In checking our site we found that we were not getting sufficient signal strength from Utah to deliver us a quality picture. Mr. McKay Larson of St. George who was in charge and founder of the Washington County Television District was a good friend of mine (a fellow Ham Radio Operator). I approached him about providing us a signal too. He had no problem with it. He said that all that would be required was that we would have to buy the transmitting antennas and they would furnish us with the signal. The board approved the purchase of our UHF translators, and the antennas. We provided channel 54 and 72 to the valley, Channel 5 and channel 4 out of Salt Lake. Later on however, we had to pay Washington County TV Board a fee for the use of their signal. As I remember, it was \$100.00 per month. It was only a short time until McKay retired and Ray Carpenter became the man we dealt with. He too, like McKay, was very supportive.

No need to go into all the details that we ran into in installing the UHF translators. This was a different type of system using different cable, different techniques, and higher frequencies. We had to change our way of doing the thing we had been doing before. We got an education. I believe the valley residents were very pleased though to have two stations from Salt Lake.

At the time I decided to retire from the TV Board we were maintaining 7 translators for channels 3, 5, 8, 13, 21, 4-SL, 5-SL. PBS was being provided by the Clark County School District. A new building had been built to house all our equipment with room to spare. We were having minimum shutdowns due to equipment failure. Rumors were coming that in the distant future we were going to have to move to digital TV. It seemed at the time, at least for me, to be nothing I needed to worry about. It was in the far distant future.

There are many small and detailed items that might be mentioned, like cleaning up and repairing after storms, being up on the hill and physically holding on to antennas to make sure they didn't blow down in a strong wind, changing a blown-out tire on the steep rocky road, saving a woman who found herself lost at the top of the hill and didn't know how she got there nor how she was going to get down. Some Cub Scouts found a Desert Turtle on top of the hill while they were visiting the TV site one afternoon. I took the turtle about 5 miles away when I left the hill to make sure that our environmentalists wouldn't find it up there and shut down our TV site. A drunk found himself up on the hill and couldn't turn around. I found him off the road and called a tow truck to get him off the hill. I have run on to several kids' beer parties. When I asked them politely to leave

they cooperated and did so with no problems, especially when I informed them that they were on Federal Land.

The "Hill" nearly became my second home for many years and a lot of memories are still with me. It really has been a lifetime experience, and to drive by on the freeway now and look up at that hill and see all the construction that has taken place since I had to climb it on foot, is nothing short of amazing!

There are many people who deserve so much credit for the TV Maintenance District. They have struggled with ways to finance the district. They have even gone so far as to take their friends to small claims court to collect back assessments owed to the district. Many board members have answered phone calls from irate valley residents about TV service as though the board members were getting paid to serve on the board. I can't count the number of phone calls that I have answered in this category. However, there have been a few that have called to thank the board for the service they gave to the valley. It has not been a thankless job as some people have indicated to me. Personally, I have enjoyed the whole history from its humble beginning to the present. The present board members are beginning a similar infancy in the translator field of digital TV. They are having to abandon all of the old, and start all over and make a new beginning because very little of the equipment they work with now can be utilized in this new age. I wish them good luck!

I'm listing all of those that I remember that I served with as board members. (Please forgive me if I miss someone.) Please give them the credit for providing television to Moapa Valley over these many years since it began in 1956.

Wendell Hutchings	Logandale
Lester Shurtliff	Overton
Reginald Kelly	Overton
Verl Hickman	Overton
Dick Heath	Overton
Ivan Jones	Overton
Fritz Godfrey	Moapa
Lynn Bowler	Overton
Ronald Dalley	Logandale
Harlan Wagner	Moapa
Bob Cronshey	Logandale
Bobby Curry	Logandale
John Hudrlik	Logandale