

## NCJ Profiles: Edward “Ed” Schmidt, OA4SS

*First licensed in the US in 1953, Ed Schmidt, OA4SS, followed his Jesuit calling, relocating to Lima, Peru, in 1967. Since then, his familiar OA4SS call sign has been heard in many major international DX CW and SSB contests. After the devastating 1970 earthquake in Peru, Ed was praised for his humanitarian efforts, including establishing the effective “Rainbow Communications Network,” connecting missionary locations throughout the country. As our first profile from South America, here is Father Ed’s ham radio story.*

### In The Beginning

As a Boy Scout, I had to learn Morse code. This got me interested in amateur radio around the time when the Novice license first became available. I flunked the CW test on my first try at age 12 in early 1952. Testing was only done in Cincinnati every 3 months (in its early days, Novice tests were administered by the FCC. — Ed.) I remember that the examiner was W8DX, whose last name was Cotton. His Novice license exam code tape had broken, so he did the best he could, using a tape cut for the 13 WPM test. Out of a group that included some 40 people, only a handful passed.

Six months later, I passed the test, and, after a few months of waiting, I received my Novice license in 1953 with the call sign WN8MWY. I was so excited that I rushed to make my first contacts. But, after a few days and nights, I had zero contacts. Also, in my excitement, I had mistakenly been sending my call sign as WN8WMY.

I finally discovered that my 6L6 was cracked. At the time, getting a new one was not so easy.

### First Elmer

My Elmer was Walt Schneider, W8UNW. His station was right across the street from St. Ann’s Parish grade school, and I enjoyed looking out of my classroom window at his little antenna farm, dreaming of getting licensed myself. Walt built my first transmitter with an 80 rectifier tube and a 6L6 oscillator. The variable capacitor (still “condensers” in those



**Father Ed at his current station with the Drake L4-B linear back in action at full power, thanks to help from his radio friends. [Courtesy of Nino Villarroel, SJ]**

years — Ed.) was something I found in an old Atwater Kent receiver in the barn of one of my paper route customers. In theory, I could pump out a whopping 6 W. My receiver was a National SW-54.

My dad, who was never interested in becoming a ham, gave me my first antenna — a Tilted Terminated Folded Dipole (TTFD) fed by a long run of TV antenna feed line into our basement, where it connected to a very small coil of copper wire slipped into the center of my 80-meter coil. I would tune the rig for maximum brightness from a flashlight bulb connected to another small loop of wire.

My first “DX” was Troy, Ohio. For

me, any out-of-town contact was DX. I had just one crystal, and it was for 3.723 kc, if I remember correctly. My Elmer explained that I should get one for a frequency that was just a few kcs from one of the Novice watering holes, such as 3.720. For every contact that I made using that rig, I spent hours and hours calling CQ and listening to see if I could hear anybody at all that might be somewhere near my frequency.

### A True Ham Family

In mid-1953 our family pediatrician, Dr. Davin, who once was W8NCU, loaned me a home-brew rig that gave me a 25 W signal. My station went

from our basement to our attic, which had been remodeled as a bedroom for my brother Herb and me. Herb was also a Boy Scout, and he soon got his Novice license, with the call sign WN8QIJ. We saved our paper route money to buy a better rig.

In those days, a Novice license was only good for a year and was nonrenewable. You had to advance at least to Technician or you were off the air. I was able to pass my General test just in time, in early 1954, but Herb was not so lucky and was off the air for a while before passing his Technician exam and becoming

W8QIJ. In another year or so our “baby sister,” Kathy, who was almost 3 years younger than me, became WN8WBQ, but with two older brothers who were licensed, Kathy was very seldom on the air. Many years later, when she wanted to talk with me here in Peru on 10 meters, she again got a Novice license, by then no longer nonrenewable. We had a few good contacts near the peak of one of the sunspot cycles. Other than talking with me, though, Kathy has not been on the air, but she keeps renewing her Novice license as KA5HSG.

### Upgrading The Shack

In 1954, Herb and I had saved enough money to get a really nice rig. The transmitter was a Johnson Viking II, accompanied by a Johnson VFO, and their antenna tuner. We also got some filters to keep the neighbors happy while watching their TVs. For a receiver, we bought a brand-new Hammarlund HQ-140. I all but gave up on the T2FD and strung up an end-fed wire long enough to permit me to work 80 meters. To fit in our yard, I had to bend it in three places, but thanks to the antenna tuner I could even work the local Sunday morning net on 160 meters.

I was finally able to work some *real* DX: the first one was TI2TD, followed by KZ5AA (Canal Zone). My third real DX contact was a CN8. At Hamilton Catholic High School in Hamilton, Ohio, we had a radio club but never got to the point of getting a club license or putting a station on the air.

### College Years

I did my undergraduate business and economics degree at Xavier University in Cincinnati from 1957 to 1961. Living on campus made it easy for me to help rejuvenate the local Reserve Officer Training Corps (ROTC) station, K8WBL. There were at least six of us in ROTC radio club including John Maier, W8AUV; Bob Conrad, W8SCK, and my brother, Herb, W8QIJ, now SK. During my four years at XU, we were able to build a Heathkit transmitter. All of us collaborated in building this rig. Each builder would check off what he had done in the manual, so the next person would know where to pick up. I was the one who performed the last step. It looked okay, so I called a number of CQs with no answers. About 2 weeks later, we received a “pink ticket” from the FCC for calling CQ on a military frequency. Whoever had wired the coils had made a serious mistake. We quickly fixed the error, but as the guilty operator, I had to make out the report for the FCC, which took no further action.

By the time I graduated from XU,



Father Ed's rooftop antenna farm with a Hy-Gain TH-7 tribander and multiple inverted V antennas. [Courtesy of Ed Schmidt, OA4SS]

we had a beam antenna and wire antennas for the other bands, including MARS frequencies.

While attending XU, our major club project was putting a closed-circuit AM radio station on the air. When I arrived, I heard Muzak on the radio in my room, so I went looking for the source. Eventually, I wound up in the office of Fr. Patrick Ratterman, SJ, who was the Dean of Men. He told me that several students who had been freshmen the previous year had installed a transmitter but that neither of them had come back to continue their studies. So, on the spot, he named me as the manager of whatever was putting out the signal and gave me the key to the "transmitter room." That turned out to be a broom closet where a very small home-brew transmitter sat on a dusty shelf. My first job as station manager was to go to the broom closet whenever I did not hear the station in my dorm room and put it back on the air. This was done by picking up the transmitter and slamming it back on the shelf. A metal-cased tube had a problem with something inside.

By the time I graduated in 1961, our little closed circuit AM station, which we called WCXU, had the use of a studio on campus and could be heard in most areas of the campus. Many, many years later this station became a powerful FM station, WVXU, with a small network of WVX-prefix stations covering Ohio, Kentucky, Indiana, and Michigan.

### Starting my Jesuit Journey

In August of 1961, I entered the Jesuits at Milford, Ohio. One of the priests stationed there was a ham, and I was able to use his station a few times during the 3 years I was there. My studies as a Jesuit then took me to North Aurora, Illinois. Since call signs could not be moved from one call area to another back then, I was issued W9IBT.

In 1966, my studies for the priesthood took me to the north shore campus of Loyola University, where I was able to set up a modest station

in my room, using dipole antennas. I had volunteered to be sent to Peru, a country that Jesuits from the Midwest were helping due to the shortage of priests and nuns. I did not think that I would be sent, since my language-learning ability appeared to be almost nil, but God can do some amazing things. First of all, they did send me. Then, once I was in language school to learn Spanish here in Lima, I discovered that I was one of the fastest-learning students. I could not believe it. The director of the school told me that I had what any person who wants to learn a second language needs to have.

First, he asked me what musical instrument I played. I replied, "Only a record player." He said that I had an excellent musical ear, something he had never found in a person who did not play an instrument. Ah! Then it hit me. *Dah-dit da-dit, dah dah dit dah.* In my early days as a Novice, there wasn't much selectivity in a National SW 54. So, one would hear maybe a dozen different tones at the same time. You needed to concentrate on the one you wanted to read and ignore the others.

The second thing that the director of the language school told me was that I seemed to enjoy laughing at my mistakes. I told him that, indeed I did. If everybody else was laughing, why not join the party? And finally, he said that I would do whatever they asked me to do without wanting to know "why." For example, in the language laboratory they would ask us to repeat what sounded to us like gibberish. Many of the others wanted to know what it meant. Our teachers did *not* want us to worry about that. They were teaching us pronunciation and the music of our new language.

During my first 2 years as a Jesuit seminarian, I had so much trouble learning Latin that they almost let me go. Classes in philosophy and theology were being taught in Latin in all seminaries, but they switched to English just in time to save my vocation to the Jesuits. Eventually I became an interpreter and worked

in a number of countries in South America and North America as well as in Spain, Kenya, and the Vatican. All of that happened thanks to my experience with Morse code.

### The Vatican Calling

In all of my travels, there was only one place where I was able to use an amateur radio station. It was at the Jesuit residence in Rome that is part of Vatican City. The station call sign was HV3SJ. I was there during October 1994 and the first 3 months of 1995. An Italian banker, Pino, IØDUD, was in charge of the station. New equipment arrived and needed to be installed. Between the two of us, we were able to quickly get the job done.

My operating time was rather limited, due to my work as an interpreter. The fact that the station was on the wrong side of a tall hill for propagation to the US certainly did not make contest operation easy. I participated for a few hours in just one contest from HV3SJ. There were two major problems: I could call CQ with nobody coming back to me. That was probably due to the hill. The other problem was the fact that numerous eastern European stations had staked the bands out hours ahead of the start of the contest. Every two or three kilocycles, someone was calling CQ over and over and over without answering anybody. It was a CW contest, and I could not find a place to get established in spite of my tempting call sign. As I mention on QRZ.com, I can only confirm contacts that I personally made from the station. (The HV3SJ license has since been cancelled and the station dismantled, so if you hear HV3SJ, it will be a pirate.)

### Becoming OA4SS

When I arrived in Lima, Peru, in 1967, one of the first things I did was to get a Peruvian amateur radio license. Reciprocal licensing made it easy. Originally, I was to be assigned to a Jesuit high school in southern Peru. So, my first Peruvian call sign was OA6BU. But within 6 months, I was reassigned to Lima. There were no 2 × 2 call signs available in Peru's

4th call district, so I asked for and received OA4AAN. It was a good call sign for CW, but I tend to speak too fast both in English and in Spanish, so what others often heard was OA4AN. After the devastating earthquake in 1970, they kidded me about this problem when passing emergency traffic.

The director of the department in the Peruvian ministry in charge of issuing licenses let me know that OA4SS was available if I wanted it, and others chimed in to say they thought it was a great idea, to avoid any confusion on phone. It would be kind of hard to jam two Ss together. So, in 1973, I became OA4SS.

### “W9 Saint Ignatius”

When I returned to the States for my sacerdotal ordination in 1971, I discovered incentive licensing. As a General class operator, I had lost a lot of band space. So, I decided to take both the Advanced and Amateur Extra tests. I passed the theory for Advanced and the 20 WPM Extra class receiving code test. I'd hardly done any CW in a while. The examiner told me that they did not provide a bug for the sending test, so I asked if I could adjust his J-38. He said okay, and, given my long experience with the J-38, I started rattling things off in excess of 20 WPM, causing a lot of jaws to drop. My usual CW contest speed is around 35 WPM. I also passed the theory exam for the Amateur Extra. Sometime later, when the FCC started letting Extras pick a vanity call sign, I got my fourth choice — W9SI — just one dit shorter than SS. “SI” could also stand for “Saint Ignatius,” the founder of the Jesuits.

### Ham Radio to the Rescue

Back in the late 1960s, phone patches were a vital part of amateur radio in countries such as Peru where local public services were all but nonexistent. Some 2.5 million people lived in the metropolitan area at the time. Local telephone numbers only had five digits. International calls, when they *could* be made, frequently turned into shouting matches. During my first 3 years in Peru, I did not have

any radio equipment. On Saturday afternoons I would go to a friend's house and use his station to run patches to my family and for other families. I usually hung out on either 28.735 or, when conditions were not good there, on 21.435.

Once in a while I would be involved in emergency traffic. One Saturday afternoon, just before leaving home to go to my friend's station, I received an urgent call from a local hospital. They had been operating on a baby that needed a special type of heart valve. The only such valve in Peru had broken during the operation. They had called all over the country but none were to be found. Could I do anything to help get one from the US? They were doing all they could to keep the baby alive. *Wow!*

The bands were loaded with signals. I do not remember whether or not a contest was in progress, only that 20 meters sounded like a jungle. So, I picked a frequency and called a medical emergency. Immediately, I got several responses. I explained the situation. Several more stations checked in. To make a short story even shorter, they organized themselves to keep my frequency clear. Two of them located the valve — one on the US east coast and the other at a California supplier. An international pilot living in California, also a ham, joined us. He was flying to Lima the next morning. So, one ham went to get the valve from the supplier in California. The pilot headed to a half-way meeting point by car to pick up the valve. The next morning, he handed it to emergency personnel who were waiting at the airport in Lima. They saved the baby.

### Getting Hooked on Contesting

Not long after this medical emergency, one of the US regulars who ran patches for me said that they were always glad to help me, even with normal family patches. But during contests, he said, they could hardly ever find an OA multiplier. I thought he was making a good point, so I participated in the next contest, and

what an experience! I was hooked and have been contesting ever since, both on CW and SSB.

To mention a few of the times that I have done rather well: in the 1996 ARRL International DX Contest, I received two plaques — World Combined Score and Single Operator, South America. In 2005 I received the ARRL World single combined high-power plaque.

As we all know, when contesting we have to be prepared for the unexpected. One Friday evening in 2015, I was tuning up for the ARRL CW DX contest. Everything sounded okay, but my transceiver had no output. Disgusted, I turned off the rig and went to bed. When I got up the next morning, much refreshed from a good night's sleep, it occurred to me that maybe *some* signal might be making it through the transistors. So, I checked my output. Sure enough. The rig was putting out a half watt. So, I hooked the transceiver back up to my Drake L4-B linear, and I now had 5 W output. I remembered that this was the limit for entering the contest in the QRP category, something that I had never done. The results amazed me. I received a diploma from the ARRL stating that I was the South American Continental leader and I was number three in the world QRP category.

Without a QSL manager or *N1MM Logger+*, I might have given up on contesting. I had neither time nor money for postage to answer so many requests for QSLs. Al Guy, KB6J, has been my manager since 1976. For the first few years I would send him carbon copies of my logs. Later, I would read my normal logs to him on 10 meters, and he would record them. Eventually, thanks to the internet, I was able to send him log files and that is the way we do things today, thanks to *N1MM+*.

### Post-Earthquake Humanitarian Efforts

In 1970 a very bad earthquake in Peru killed thousands of people. I had been organizing and installing a fixed-frequency missionary communi-

cations network in the northern part of the country. The Peruvian government put me in charge of reestablishing communications in the hardest-hit area. We had modified some Heathkit Civil Air Patrol rigs to put them on special frequencies on 40 meters, just above the amateur band. I had a few of these rigs with me here in Lima that had not yet been installed. Another ham, a Peruvian, loaned me his Drake TR-4 with which I was able to keep in touch with my parents in the US. My 40-meter emergency dipole loaded just fine on 15 meters. I wound up being known by pilots working in the area as the "Anta Control Tower operator." There was no such thing

as a "tower." Anta was a cow pasture with enough space to land helicopters and the "Buffalo" fixed-winged aircraft that eventually arrived from Canada.

Lots of strange and funny things happened during the 2 weeks that I was "deployed." Most members of my team, which included nurses, another priest, and several college students, had never used a radio in their entire lives. I gave them one training session in Lima just before we left. They had to learn how to string up a dipole antenna, start and use a portable generator, and handle basic message traffic on the fly. Eventually, helicopters from the US arrived, and they hooked up with us.

### The Rainbow Network

After the 1970 earthquake we were able to set up a 300-station strong network, known as "The Rainbow Network," covering missionary locations in most of Peru. These stations were not amateur radio stations. Most of the frequencies were just above the 40-meter amateur band. My brother, Herb helped me to install some of these stations along the Amazon River as it flows through Peru.

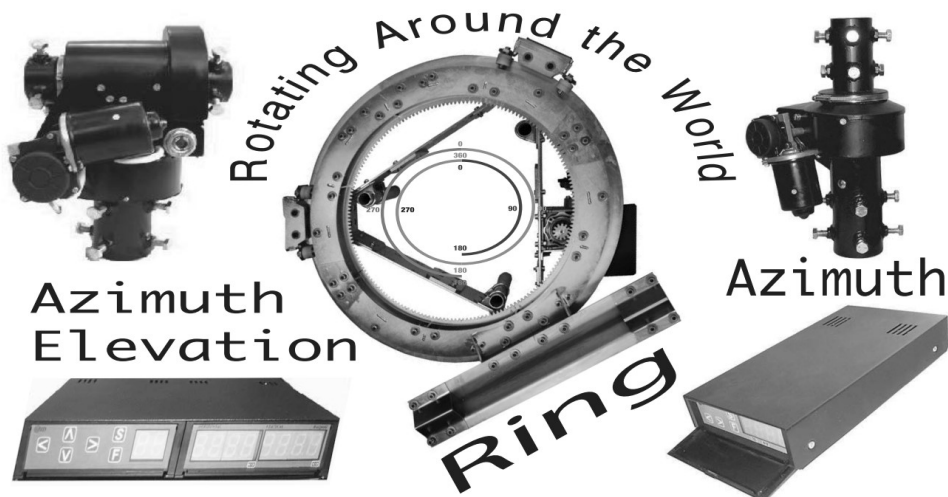
As for my work in Peru, my specialty has been ethical formation for professionals in administration and economics. It did not take long for me to become aware of the fact that the way business ethics are taught in the US and Europe was not very effective in Latin America. Over the years I did basic research concerning this problem, winding up with a doctoral degree. I wrote two textbooks, both in Spanish. One of them, *Ética y negocios para América Latina*, had co-editions in Bolivia and in Argentina. I have been able to help prepare professors who desire to use my methodology in seven countries.

### The Value of Fellowship

All of my radio equipment has been donated by hams in the US. A local ham friend maintains it for me. At present I am running a Kenwood TS-480, a Drake L-4B linear, a Kenwood VM-71 for VHF and UHF, and a Kenwood TS-140. My antennas include a Hy-Gain TH-7, a Diamond X50A, and inverted Vs for 80, 40, 30, 17, 12, and 6 meters. Thanks to Jim, W9VNE, and a group of his friends, I have new finals in the L-4B that put me back on the air with full power.

*Thanks, Father Ed, for sharing with us the various stages of your fascinating ham radio career. Your humanitarian efforts are an important reminder that amateur radio is as much about helping others as it is about operating achievements. We are grateful for all you've done for our hobby, and wish you continued radiosport success in the years ahead.*

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## Workshop Chronicles

### Field Day Ideas

In keeping with this *NCJ* issue's Field Day focus, here are some hints, kinks, tips, and techniques that may provide useful ideas to not only make your FD efforts more productive but more fun.

Despite the old saw, "It's not a contest, but an operating exercise," many of those among us go all out on Field Day, and it's from such efforts that many of us can learn how to improve our scores. The CARA/Potomac Valley Radio Club is one such group, having the highest score — and quite often the most transmitters on the air at one time — for several years in a row. I've been able to make the trip to the Maryland-DC area a few times to take part with my contesting brethren; I am always amazed.

The club's primary focus for success (considering its chosen class — always multiple transmitters, the highest being 51A) is on eliminating interference between radios (see "Field Day Interference Management" by Nelson Sollenberger, KA2C, and

Steve Struharik, W8EIH, elsewhere in this issue).

While many believe it's impossible to do this without using extensive filtering systems and the highest-quality radios, some simple basic principles help to ensure success. For example:

- 1 The club utilizes the maximum permitted site diameter.
- 2 All HF antennas are horizontally polarized.
- 3 All Yagis are pointed west, and none are rotatable. For example, in the 20-meter setup, which includes four stations on the air for the entire 24 hours, the SSB (14.320 MHz), GOTA (14.175 MHz), CW (14.025 MHz), and RTTY (14.080 MHz) station antennas are 700 feet apart.

A large part of PVRC's success derives from their use of surplus AB-577 and 621 portable mast systems. These poles are easy to put up and take down, and their portability makes them ideal supports. Deployed in a straight line, each carries a homebrew monoband Yagi,

covering 10 – 40 meters, offering 15 HF stations band coverage. The horizontal polarization and dedicated directionality are significant factors to their success.

Many clubs rely on the popular Rohn 25G tower to support a beam, usually some sort of tribander. Often limited to 40 feet or less, these towers are sometimes "walked up" into place, and this is where trouble can happen. It's wise, if at all possible, to practice this, so that everyone involved not only knows what they're supposed to do but has actual first-hand experience doing their particular task. Individuals will hold guy lines as the tower goes up (I cannot stress enough how serious a task this is), ensuring the tower does not then fall over once it's vertical!

The forces required to pull such a tower up and into place are larger than one might first expect, another reason a practice session is a great idea. While the base for such a tower will be temporary, it must be capable of withstanding the forces placed on it. This is not the time or place to have Fred, the heaviest member of the tower crew, stand on the base, assuming he'll be able to hold it in place. Nor is it a good idea to dig a small hole and stab the base into that. And the guys (even for such a temporary tower) should not be taken lightly either.

Be certain that what you anchor to is capable of holding the tower in place. It bears repeating that such structures should not be climbed. Ward Silver, NØAX, covered this topic quite well within the ARRL's blog survey, "On All Bands," [www.onallbands.com/how-to-put-up-a-field-day-tower-safely/](http://www.onallbands.com/how-to-put-up-a-field-day-tower-safely/).

Some radio clubs are fortunate to have not only a small van or trailer serving as an operating position, but for holding a crank-up tower.



Figure 1 — W1VE, K1RX, and KC1UCG at the K1R Field Day in 2021.

And while operating from the relative comfort (possibly air conditioned?) of such a venue is great, there's certainly nothing to lessen the fun operating from inside a tent or suitable outdoor park shelter (see Figure 1).

Some radio clubs have a dedicated tower trailer, typically equipped with a crank-up tower. K9CT's modified

Aluma Tower is an example (see Figure 2).

Back in 1997, the May QST published, "A Skyhook for the 90s," positing it as a solution for those who might want to put up a large vertical antenna for Field Day. And while that was never the intention of the article (we were serious contest-

ers and DXers at N4ZC), the article contains considerable information not only on selecting a suitable inflatable kytoon (a portmanteau of "kite" and "balloon"), but principles of tethered flight, and antenna selection and use. It certainly provided the N4ZC contest team with a unique and effective 160-meter transmit antenna.

While we never used it for Field Day, we did work a lot of DX with this simple vertical, and it could be taken down easily enough once the contest was over. This article is an excellent starting point for anyone interested in using such an antenna support. It includes a technical bibliography.



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**Figure 2 — K9CT's trailer tower, equipped with a properly guyed Aluma Tower and a SteppIR antenna providing 6 – 40 meter coverage.**