

AZ4F - 1998 CQ WW WPX M/M

By Herman Baez, lu3fpFIRST CW M/M FROM ARGENTINA



15+ operators, 6 bands, 6 transceivers, multiple antennas and towers, and computers and computer network to coordinate the operations... all contributed to the success of a the first multi-multi CW contest station operation from Argentina.



At the beginning of March 1998 we started work to make the participation of an Argentine team in the CW multi operator multi transmitter category a reality. Sights were set on the CQ WW WPX of the month of May. Despite the previous multi multi operations of LU4FM, this would be the first on telegraphy. There were also questions of interference between the different bands, the problem of obtaining more than 6 linear amplifiers and ranceptors with CW filters and putting together more than 15 operators with contest experience. The Radio Club didn't have enough telegrapher operators, so we contacted the most people possible. This work was one of the hardest tasks. At the beginning we only had 3 or 4 people, and to be truthful, we didn't know many others.

Fortunately, at the end of those two months, we would send about 40 invitations to people all over the country and Uruguay (we invited everyone we could find).The operators were:

- LU1FAM Lucas - Rosario, Santa Fe
- LW1EXU Guillermo - La Plata, Buenos Aires
- LU3FP (ex LU3FSP) Hernan - Rosario, Santa Fe
- LU4FD Manuel - Rosario, Santa Fe

- LU4FPZ Sebastian - Rosario, Santa Fe
- LW4DYI Juan - Tandil, Buenos Aires
- LU5ER Horacio - San Pedro, Buenos Aires
- LU5FAO Jose Maria - Rosario, Santa Fe
- LU5FC (ex LU4FRE) Jesus - Rosario, Santa Fe
- LU5FF (ex LU5FIL) Javier - San Justo, Buenos Aires
- LU6KK (ex LU6KBX) Federico - Yerba Buena, Tucuman
- LU6UBN Luis - General Pico, La Pampa



LU7DW Claudio - Villa Celina, Buenos Aires

We did the paper work with the National Commission of Communications (CNC), so they would assign the distinctive sign (call letters) AZ4F, which has already been used in the WPX of 1994, the opportunity in which Martin - LW9EUJ - broke the South American record for the 40 meters band. We also did with anticipation partial tests of interaction (interference) between different bands, due to the limited physical space of the field, the antennas are too close.

Our idea was to work in network, it's to say, all the computers interconnected operating in real time, and this would bring us more than a problem.

The antennas available were the following: 10 Mtrs: Array 6 x 6
 15 Mtrs: 6 Elements
 20 Mtrs: 5 Elements
 40 Mtrs: 3 Elements
 80 Mtrs: Dipole
 160 Mtrs: Dipole

Since 10 Meters is the band most affected by harmonics, and the shack is at about 30 meters from the tower, we planned to install the 10 meter station beneath the antenna, in a mobile home. This way, we shortened the transmission line and maybe would avoid some of the interference. This was not possible so that, according to the original configuration, the network's cables couldn't take the signal such a distance.

We used batteries to be able to stay on the air (operating manually with 100 watts) in case of an unlikely power blackout. We also set up electronic keyers if something went wrong with the PCs.

In the operations part, we thought to place a fixed operator per band, with the possibility of modifying this as situations presented themselves during the contest. This option proved very useful, even though we needed more people.



The task of getting the necessary equipment and linear amplifiers was more than titanic and on several moments seemed impossible. Despite being this one of the areas with most activities, and the Club having an enormous amount of members, we weren't able to gather the materials. At that moment, "unknown" people from Buenos Aires gave us unconditional support: the Argentine Group of CW (GACW) put at our disposition enough linear amplifiers and equipment to complete the total (fortunately, at last moment we managed to put together everything without the need to turn to Buenos Aires). Even though having previously tested the isolation and interaction between the stations, we had serious problems mainly with the 80 meters band. Because of this, it did not work like it should have done because of the interference that the other bands created. The final score was:

| BAND | QSO | QSO.PTS |
|---------------|------|---------|
| 160 | 40 | 16 |
| 80 | 137 | 30 |
| 40 | 1038 | 237 |
| 20 | 1642 | 302 |
| 15 | 1925 | 310 |
| 10 | 974 | 130 |
| Totals | 5756 | 1025 |

| | |
|--------------------|------------|
| Total Score | 20,810,575 |
|--------------------|------------|

As is typical in this kind of operation, a lot of problems occurred during the whole weekend. The most crucial was a failure in the cable-modem to connect the PCs to the equipment. This happened a few hours before the contest. Even though, the six cables had already been tested, connecting the first caused the parallel ports to burn out in one machine (unfortunately for me, it was my Pentium). We didn't want to push our luck, so that we had to arbitrate the means necessary to get the materials in Rosario and assemble 6 new cables.

Insignificant details like this a few hours before the contest can cost a very high price, and provokes an excessive and unnecessary waste of adrenaline.

The idea of operating in a network stayed just that, since the new cables were assembled for serial ports (which is what the network uses).

Although this way of working is nonessential in a WPX contest, in my opinion, to be operating in a network gives a little more dynamism and secures the idea of working as a team.



It is right that I'd thought that I would have to work a lot to carry out everything, but I have to concede that I hadn't imagined that it was going to be such an because we didn't have enough people on CW and most of the thing I had to handle myself. Having to account for thousands of details to have present in the organization, adding to this the pressure and the set backs that presented themselves, the weekend of the contest I was practically not in operating condition.

We had to anticipate how to get more than 15 operators, more than 6 sets with CW filters, more than 6 computers, wattmeter, propagation pronostics, internet bulletins, assemble coaxial hoses for all the bands, test antennas, rotors, linears, program pre-contest meetings on 80 meters with the operators, operators, cooks, board, transportation, etc...

Afterwards they made me realize that this had been the first multi-multi operation on CW from Argentina! Even though there are some operations in the magazines, these were originally multi single reassigned to the M/M category. Manuel, LU4FD, and I are grateful to all of those who

worked arm in arm to realize this project. It was our first experience so there are things to refine and some new ideas, which gives us hope to think about future operations. Until a very short time ago, I wouldn't have dreamt of the practicality of an idea of this kind. Just as in telegraphy has not developed in the way it could have done.

Good luck
LU3FP Hernan Baez.

