

In 1992, twenty-five years ago, from this writing, I was at Palmer Station Antarctica:

"In 1992, shuttle astronauts [[aboard mission STS-45](#)] David Leestma, N5WQC, and Kathryn Sullivan, N5YYYY, also worked [Palmer Station](#) [KC4AAC] to complete their WAC list." Those contacts were with k1oIq operating at [KC4AAC](#). [News item from ARRL]

I knew before the launch of STS-45 that the Atlantis crew would be looking to make WAC during their ten day mission and that they would have only one or two opportunities where their orbit would put them in view of Palmer Station. Through correspondence with the NASA Goddard radio club I relayed the message that KC4AAC would be waiting for them.

Palmer at that time sent and received most of its email to the ATSVAX at an earth station in Malabar Florida via two transponders on ATS-3, an already "old" geostationary satellite. The hardware at Palmer comprised two pair of seven element crossed dipoles, one for transmit, the other for receive--that's 28 elements total each way. Other equipment included a 200watt 2m amplifier plus the exciter, receiver, and modems necessary for voice and data communications.

The antennas were optimised for frequencies of the ATS-3 link which were just outside, above and below, the 2m Ham Band, but what's a little SWR between radios, eh? I had brought with me a pair of 2m handhelds, IC-O2AT. (It must have been that "AT" in their name that made everything work together.) Between the spatial separation of the transmit and receive antennas and the frequencies to be used for STS-45 I was able to arrange the two Icoms, the 200 watt amp, and the antennas for full duplex operation. On the computer we had running a satellite tracking programme that displayed the orbital path of the shuttle and when the spacecraft was indicated to be above my horizon I called.

STS-45 answered right away and after the necessary pleasantries of callsigns the first words of the pilot, N5WQW, were: "You made our day!" Palmer Station, KC4AAC/k1oIq, was their seventh continent. WAC! It was a short contact; they were due north, cruising above Punta Arenas Chile, only a few degrees above my local horizon and moving along at orbital velocity so Atlantis was not visible for very long but about ninety minutes later, on their next orbit, we did it again just to be sure. Months later several QSL cards, confirming our contacts, arrived in the skumail.

[Cutline for QSL photo] Top right and left: Two QSL cards from STS-45. Across the bottom: Mission patch from STS-45 and station patches from Palmer. In the middle a personal note from Kathy Sullivan, N5YYYY.

