## Our Alaskan Adventure

(N3CMD — August 2003)

In early 2003 my wife and I began planning for a cruise on the Inside Passage of British Columbia and southeast Alaska in June 2003. As we firmed our reservations on a Holland American Line cruise, I became interested in trying to keep in touch with our children in Utah and to determine the feasibility of communicating via amateur radio from a remote location utilizing only limited equipment and power. With propagation conditions on the wane, I wondered if a traditional phone patch over single side-band voice would work at all given the fact that I would probably be limited to an antenna size of not more than 8 feet in length with less than an ideal installation.

We were able to reserve a stateroom with a veranda (outside location) all the way aft and at the highest level possible and I was able to set up an antenna as shown below.





The veranda of our stateroom had a one inch steel bar running about one foot below the wooden handrail and provided me with an excellent place to clamp-on mirror mount with the appropriate 3/8 inch by 24 threads per inch antenna mount incorporated into a stout aluminum "L" shaped bracket. I acquired several different configurations of mirror mounts (from the Citizens Band Radio section of a local truck stop) to meet any of the mounting locations aboard ship which I envisioned I might encounter. Fortunately, the simplest of arrangements was all that was required aboard ship. To provide a good ground to the ship, I scraped away about 10 years worth of paint to get to bare metal which made the ship and its location in the water my personal ground plane. The antenna consisted of two twenty-two inch sections of MO-4 Hustler masts topped out with Hustler resonators for 80, 40, and 20 meters. The tip of the antenna was approximately seventy feet above the water. This antenna system was determined to be the best over-all solution considering airline baggage weight and size limitations as well as shipboard mounting arrangements.

In discussing my concern about propagation issues with my good friend and radio amateur associate, Roll Lewis, N7RU, who lives in South Jordan, Utah, he suggested that I consider using a digital mode which would require less power and a less than perfect antenna system. I thought it was a neat idea but the last time I worked in the digital mode was with RTTY using the Robot system. Roll's description of his work with

PACTOR and the Winlink2000 e-mail system using amateur radio peaked my interest. I was especially interested in being able to send and receive e-mails via amateur radio and the Internet to and from almost any e-mail address in existence. This was especially attractive because I could communicate with our family very easily using this method of communications and we didn't have to have to do a great deal of schedule planning (as with telephone patching) which can be difficult to execute. There was only one problem I had no knowledge of PACTOR, had no computer terminal interface, and had only sixty days until the sailing date.

With Ron's help and the ability to do quite a bit of market research through the Internet and the ARRL product review library, the transceiver-computer interface I decided to acquire was the Kantronics KAM XL terminal node controller (TNC) which is their third generation multi-mode TNC. Cheryl Seiwald and her staff at Kantronics were most helpful in answering the many technical questions I had and helping me to acquire the proper piece of equipment and associated cabling connections for my radio and computer. It is not very often that the chief executive (Cheryl Seiwald) of a company takes a personal interest in a humble customer such as myself and I was very appreciative of this consideration. Documentation for the KAM XL and the PacTerm software is long but quite thorough and with Ron's assistance I was able to get through it all and begin to make the equipment and associated software, which were very new and sometimes foreign to me, work. The final schooling, which I needed, was in the use of the Winlink2000 e-mail system. Ron and I had many "training QSOs" in PACTOR and we sent several practice e-mail messages via Winlink in order that I would have some proficiency in all of this when I set up my station aboard ship. As I became more familiar with the KAM XL, I was impressed with its flexibility and ease of operation. To keep the base station installation intact so that I could keep practicing in the digital mode, I acquired a second KAM XL specifically for my "portable radio equipment bag" and configured the cable connection to the transceiver using the audio connection in the mike cable in lieu of using the speaker output jack of the transceiver. This arrangement permitted me to operate with earphones by keeping the audio connection between the TNC and transceiver as indicated above. All of my expectations were exceeded and it was very satisfying to be able to "lock-in" to Winlink2000 stations around the country to send and receive e-mail traffic. To be sure the portable station would function properly, I set up the portable station in my garage and was able to make several PACTOR and Winlink2000 contacts before leaving on our cruise.

Over the Christmas holidays while visiting an ailing mother in Hawaii, I set up a portable HF station near Pearl Harbor using a Kenwood TS-50 transceiver, an SEC 1223 power supply, an MFJ 941E tuner, and a GSRV antenna. These items fit into a suitcase quite well and I had no difficulty in transporting them to Honolulu. I was pleased with the operation of the portable set-up and decided to use the same equipment, less the GSRV, for the cruise. Traveling to Honolulu with a portable station in a suitcase was simple and straightforward. However, packing an antenna with components approximately forty-eight inches in length posed some unique problems. Moreover, our cruise itinerary included a flight to Seattle and a bus transfer from Seattle to Vancouver, B.C. to the cruise ship. I had no way to send items ahead which meant everything had to

accompany me as luggage. In addition, we knew that storage space aboard ship would be limited so we didn't want to have an excessive number of bags to stow in the stateroom. I was also concerned about getting all of the equipment through the numerous security and immigration checkpoints along the way. Fortunately, I was able to fit the entire station with all antenna parts into a hard case golf bag which is shown below. The 80-meter resonator was the longest item to be packed and had to be bowed slightly so it would fit in the golf case which was 48 inches long. Upholstery foam was cut and glued together to make up the padded compartments needed inside the golf case.



Once we were embarked on Holland America's Maasdam, it took approximately a half hour to set up my maritime mobile station. I had coordinated with Holland America in advance of our cruise and had a fairly good idea of what to expect. Holland America was very helpful and supportive of "my cruise project". The only power outlets available in the room were in the bathroom for hairdryers and on the built-in desk, which was conveniently located, near the veranda. The arrangement of the equipment on the desk is shown below.



Ron Lewis, N7RU, in West Jordan, Utah and I kept a daily schedule on PACTOR. Our propagation research helped us set an evening schedule at 0400 UTC on 40 meters and a morning schedule at 1400 UTC on 20 meters. Voice communications at these times were marginal at best but PACTOR came through fine throughout our journey from Vancouver, B.C. to Juneau, Skagway, Glacier Bay, and Ketchikan, Alaska returning to Vancouver a week later. E-mail via the Winlink2000 connection was never a problem. If propagation wasn't good, I would just try another time or another frequency and was able to pass and receive traffic without difficulty. I have since added a 30 meter resonator to my portable bag to provide an additional band for added flexibility and propagation reliability.

One of the reasons for taking a portable amateur station on our cruise was to prove to our religious organization that it is possible to communicate from remote locations quite easily and to be able to pass traffic accurately using a digital mode of communications and the Winlink2000 system. Needles to say, they were impressed and our children were delighted to hear of our doings on a daily basis via e-mail (which they could answer us) without the fuss and bother of phone patch schedules and marginal propagation conditions.

Being an old Navy man, I couldn't resist the following picture and the thought which it conveys for us we had a great time full of wonderful memories and as we continue our journey in life we hope and pray always for a "fair wind and a following sea."

