Music For The Brass Pounder

Whether they realized it or not, Mr. Kennelley and Mr. Heaviside noted a tone poem as certainly as Strauss, but where Strauss was concerned with vibrations and harmonics at audio frequencies produced by musical instruments, the former were concerned with electro-magnetic vibrations at various radio frequencies as affected by the ionosphere. The working wireless telegrapher, removed from the awesome and scientific, was placed in a mundane position of carrying out communication, and in this work, could let his imagination run rampant, motivated by the phenomena of skip and selective fading.

In the high frequencies, early morning seemed to be the most fertile time for this condition. During ground radio check in Singapore Harbor, as the sun rose from the straits, was a good example.

On this trip I had KIABV aboard a flying boat built by the Glenn L. Martin Company and named the China Clipper. It afforded a transmitter forward behind my seat, and one aft, in the tail; each with plug-in coils and powered with a dynamotor. The transmitters consisted of a UX210 master oscillator and a UX210 power amplifier.

At the operating position were two receivers, each three tube with a regenerative detector, untuned rf stage and one stage of audio. As with the transmitters, each used plug-in coils and either could be used with the D/P loop. A fixed and trailing antenna completed the communications equipment aboard.

With this equipment I, as did all the Pan Am radio officers, endeavored to maintain constant communication, handle all traffic and furnish long and short range radio bearings to the navigator. In addition, during an instrument approach to the landing area in stormy or foggy weather, we assisted the captain in his orientation with
numerous relative bearings taken on a homing signal during aircraft maneuvers in a prescribed manner.

It was common practice to gather weather reports from ships at sea and if a ship were on our course, I would try to enlist the cooperation of the radio officer to make signals for me on which to take bearings as we flew past, even if he had to stay up half the night rather than close his station on time. I can't remember of anyone turning me down, such was the magic of Clipper Glory!

Perhaps working an aircraft, (a five-letter call), from shipboard was a novelty, but its ramifications weren't overlooked. Many times, in the far reaches of the Pacific, I've taken long messages--letters really--from lonely operators on six knot freighters and made sure they'd reach their destinations when I arrived stateside.

It was about six A.M. Soon, with passengers and cargo aboard, we would thread our way through the many anchored ships and look for a place clear enough in which to make our take-off run. The longer we had to wait, the more difficult this became as the temperature, already high, was rising rapidly and the new day was losing its freshness and the clammy humidity was taking hold. This condition reduced the power from the engines as it did the energy from the human body and spirit.

My small radio compartment, directly behind the pilots, would seem unbearable shortly. Perspiration was forming on my exposed skin. An hour before, when we left the Raffles Hotel with a heavy English breakfast under our belts, it was almost chilly. As the heat rose, it would have been a relief to take off my uniform coat, had I one, but we didn't wear coats west of Midway Islands.

The engineer had the master switch turned on now, his gasoline sticking overwith, and I switched on my guard receiver. As I fitted
the split earphones to my head, I heard KZDY, Panay, 1700 miles away in the Philippines call ZCK in Hong Kong with a weather report. He would be my guard station a couple of days later on my way from Manila to Guam.

As usual, ZCK, from its great tower at Kai Tek Airport and with its powerful RAC note, immediately answered.

*His signal must be at least 30 kHz wide* I thought.

This heavy, raspy note appeared as an interrupted ribbon to my mind, and as it bounced for 2500 miles toward Singapore from that ionized layer above, the ribbon seemed to twist and turn and it was colored, varying from light to chocolate brown.

Finally, Panay heard ZCK and gave him his message. Then the Chinaman wanted to clear his traffic—a weather sequence. KZDY, appearing light blue with a feathery dc tone, gave the go ahead. As the brown ribbon progressed with the message, he frequently had to break-in and ask for a repeat. This was unusual, as the Filipino operators as a whole were very good and this particular one was excellent. He had also authored the famous message to the Communications Superintendent, "Cobra in battery box" and then was unraised for two hours!

He kept repeating QRN, QRN as he broke and finally, in desperation, rapidly transmitted, "Chung, this QRN is thicker than your head!" This got the point across. Chung cooperated sufficiently and they cleared the traffic.

Here I jumped in and called VPW, Singapore, who would be my guard station until abeam of Borneo, following which I would pick up KZDK who would guard me until arrival in Manila.

No answer from VPW. It's too early for him to be having tea I thought.
Fifteen hundred miles away K2BJ called me in a staccato crystal tone with a light blue hue. Panay's feathery call followed. I thanked them, we exchanged wire sines, then I said "Good morning" and called VPW again. No answer.

Then a wavering signal, appearing bluish but mixed with a little dull pink, called with "FR", which was my wire sine. I came back with "es" for "yes."

He answered with, "EP here. Good morning, big brother. You're sounding good."

"Hi, Ev," I said. My brother was on watch at Guam, 3,000 miles away. Somewhere in its journey, his signal with its several bounces against the ionosphere layer had picked up this unusual color for KNBG.

"Good to hear from you. Be seeing you in a couple of days."

As we signed off and I called VPW again, I thought back to how, not too many years ago, my brother, as a stateside radio amateur, used to handle large numbers of messages for Navy men on Guam. In those days we had hardly heard of Guam, let alone knew where it was. Of course, neither of us dreamed that before long, he would be a prisoner and the Japanese would hold him for almost four years.

There was a Frenchman on the channel now, probably in French Indo China. His 120 cycle note was the color of mud and sounded as if it were interrupted with the most unwieldy key on earth. He never stopped sending, all the while fading in and out, until one wondered what manner of man was copying him.

Then VPW called me. Slowly and so loud his signal was blocking my three tuber. I had to read his key clicks.

"QSK?" I asked, pumping away at my hand key.
The Malay replied "QRK5." I thanked him, gave him my QTO message, since we'd just left our mooring, and positioned myself to watch the ships flash by through my little starboard window as we prepared for our take off run. I could hear KNBI at Wake Island, 5000 miles away, a weak crystal dc signal rapidly fading as if interrupted by the Creator's key in an unknown code. He was calling KHALIF, the Philippine Clipper and my sistership. Since we'd been delayed outbound four days at Guam by a typhoon I figured, on schedule, that he must be bound for Guam from Wake.

I called KHALIF on impulse. Wonder of wonders, in what seemed like an ancient voice, he answered me. His note, mostly dc, cracked and faded with age and distance and all the while his dynamotor beat a steady rhythm in the background.

"Wo," I said. I used the morse O.

"JA," came the reply. His keying didn't really follow the bug, the effort too great and unbearable for the combination keying/antenna relay.

"FR here. QRO?"

"3G," he said.

Then he was gone. Someone in the heavens had thrown the main switch.

"S U Johnny," I said. I knew I wouldn't hear a reply. Also I knew all stations would fade out soon except VPW.

As I adjusted my seat belt and settled back for the take off run, I was satisfied with my world. Where else could I find such peace and contentment, such interest and satisfaction? Where else such music and invention for my soul?