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THE RADIOGRAM

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SCANNING THE HIGH SEAS

MONITORING RADIO TRAFFIC FROM NEW YORK TO BERMUDA

When one thinks of taking an ocean cruise to exotic and distant places, it is quite likely that he does not consider taking along a scanner radio. For the sake of your marriage, I would not recommend spending time on the sun deck listening to a scanner while your mate is trying to get you involved in some other type of sports activity. But in any case, if you should be so bold as to attempt to take along a scanner on an ocean cruise, I may be able to give you some hints on what to do and what to expect.

Our cruise took place in June of this year on board the Royal Caribbean Cruise Line's *Song of Norway*. The ship sailed from New York's Hudson River piers across 600 miles of the North Atlantic to the island paradise of Bermuda. However before I began the cruise, I had to spend some time doing homework with regards to what type of equipment to bring, what power sources were on the ship, and what frequencies to listen to. Whenever you travel to a new area with a scanner, it is always wise to plan this type of material in advance. It will save you a lot of time once you are under way.

CHECKING LOCAL GOVERNMENTAL REGULATIONS

One of my first contacts was with the Department of Telecommunications for Bermuda. It was during this contact that I found out bringing a scanner to Bermuda was permissible, but I would have to obtain a license for each scanner I brought with me. The licensing of scanners is not a difficult thing to accomplish. In fact the Department of Telecommunications will send the necessary forms to you. However, be sure to plan this procedure well in advance as governmental agencies in many countries work at an extremely slow pace. (For those who would like to take a scanner to Bermuda, simply write to the Department of Telecommunications, P.O. Box HM 101, Hamilton HM AX - Bermuda.) While on the phone with the D.O.T. officials, I asked about the availability of frequency information in Bermuda. The official policy is that the D.O.T. does not release information on licensed operations. So it was up to me to find an alternative way of obtaining frequencies before I arrived in Bermuda.

First things first. Bermuda, being an entirely different country, will no doubt have different regulations as compared to the United States regarding the possessionand use of scanners. It was necessary to check with the Bermuda Government to get the specifics on bringing a scanner there.

FINDING FREQUENCIES (Cont on Page 2)

NEW COUNTY PRINTOUTS IMMEDIATELY AVAILABLE

Since the last *Radiogram*, we have been busy researching county printouts. As always we add more counties to our data base. The following list is what has been researched since the last newsletter. If you have an interest in any of these or any of our other counties, the cost is $3.00 plus a SASE for each request. Our list of new counties is:

ALABAMA	ARKANSAS	CALIFORNIA	FLORIDA	GEORGIA	IOWA	INDIANA
Clarke	Garland	San Bernardino	Escambia	Dekalb	Webster	Elkhart
Mobile	Pulaski			Forsyth		St. Joseph
Tuscaloosa	St. Francis					

ILLINOIS	MARYLAND	MASSACHUSETTS	MICHIGAN	MISSOURI	MONTANA	NEW JERSEY
Carroll	Worcester	Franklin	Crawford	Adair	Daniels	Mercer
		Middlesex		Grundy	Roosevelt	
					Sheridan	

NEW MEXICO	NEW YORK	NORTH CAROLINA	NORTH DAKOTA	PENNSYLVANIA	TENNESSEE	
Socorro	Cayuga	Chatham	Williams	Dauphin	Anderson	Loudon
		Cumberland		Luzerne	Blount	McMinn
		Lee		York	Hamilton	Roane
		Moore			Knox	

(CONTINUED ON PAGE 4)

It is always better to have frequency choices in hand before arriving in a new area. Using the search mode on a scanner is OK, but it can be time-consuming and even when you come up with an active frequency, you are still not sure exactly what you have found. I decided to check with a local radio shop in Bermuda. In my conversations with the D.O.T., I learned that there was a Radio Shack store in Hamilton. It only took a few minutes to obtain their telephone number from the information operator. Soon I was talking to a clerk who gave me a few local frequencies over the phone. I asked him if he would send me his local list so I could arrange the data for my trip. He was more than happy to do so, and in a matter of days, I had a rough list of active frequencies in Bermuda.

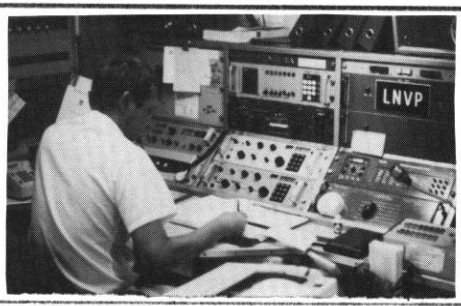
The next task was to arrange the data into some order and eliminate duplicates and obvious errors. This task completed, I had almost 100 frequencies. I also added known frequencies from my own data base, such as aeronautical frequencies and marine frequencies. These types of listings can be found in ITU (International Telecommunications Union) marine charts and in aeronautical charts and directories for the area.

Now I had my basic frequenciese together and was ready to scan the island of Bermuda with my officially licensed scanners. What should the next pre-trip step be?

REGISTERING WITH U.S. CUSTOMS

Most scanners are no longer made in the U.S. or even Japan for that matter. The majority of scanners are manufactured in Taiwan. There is not much of a problem in taking these radios outside this country, but there may be a problem getting the units back in unless you take the time to register them with the U.S. Customs Service. It is a simple matter to take the scanners to the local Customs office and have the clerk fill out the necessary paperwork so you will have what is needed to get the scanners back home.

Now that the scanners are registered with both respective governments and we have a beginning list of frequencies we are just about ready to take the trip. Be sure that you have a way of powering your scanners wherever you are going, or if you use a battery-operated unit, make sure you have enough fresh batteries or a way of charging your battery pack. You will also want to make sure that the scanners are packed securely so that the luggage handlers don't destroy your scanner before you get to your destination. There is no real need to hand carry the scanners, they will do quite well in the luggage compartment of airliners.



There is always a radio room on board ship, be sure to check with the radio officers about a tour.

MONITORING ON BOARD SHIP

While our ship was in harbor in New York, there was plenty of activity to listen to. I will list a few frequencies that you may find interesting to listen to while in port at the end of this article. The real trick is trying to find things to listen to when you are 250 miles out to sea. There is always the ship's communications with other ships in marine channels. The primary frequency to listen to here is 156.800 MHz. This frequency is reserved worldwide for a calling and emergency frequency. Most ship to shore activity, however, will not take place on bands that a scanner can receive.

I ended up listening for various NOAA weather stations. Quite suprisingly these stations can be heard while out to sea between New York and Bermuda. I could easily hear the NOAA weather station from Newport News, Virginia while we were still 200 miles off the U.S. coast. You might also want to listen for aircraft, however once airliners are out over the ocean they also use HF (High Freqruency) and scanners are not really capable of listening in on these frequencies.

Our ship, *The Song of Norway*, also had shipboard communications via Motorola hand held radios. Again, if you can do research ahead of time, you might be able to locate some of these internal frequencies. One tip, be sure to listen to your scanner on deck. The reception in most cabins is poor because of all the steel surrounding the staterooms.

My recommendation is to take a few minutes experimenting on what can be heard on your scanner, and store those frequencies into memory. I even tuned into the amateur 10 meter FM bands and into the citizens band frequencies to find activity. Quite suprisingly, the CB band is quite active in the middle of the Atlantic, but I ended up hearing activity from Chicago. All and all, what you can hear on a scanner in the middle of an ocean is quite limited, but there is activity if you look hard enough. Actually you probably would be better off enjoying shipboard activities and save your scanner for



I also managed to stop by the police station at Saint Georges. (Photo by Norm Schrein)

There is always a radio room on board ship, and if you call ahead, the radio officers will be more than happy to let you have a tour. This is not one of the regular tours provided by the ship company, so you need to plan this trip yourself.

MONITORING BERMUDA

Once our ship landed, it was time not only to tour the island of Bermuda but to listen to what types of radio traffic I could find. Bermuda of course is no different than most other places on the globe, there is always a need for some sort of police and fire protection as well as a variety of other types of public service agencies. The object here was to be able to "bag" those services in the act of using their radio equipment and verifying the accuracy of the frequencies on my list. I was also interested in the mode in which they transmitted the information. Were the communications conducted in AM or FM and were they simplex or duplex? Only having a scanner with me on the trip would be able to answer these questions. While touring the island, I would be able to spot vehicles with two-way radio equipment and get a better idea of who, and what, to listen for.

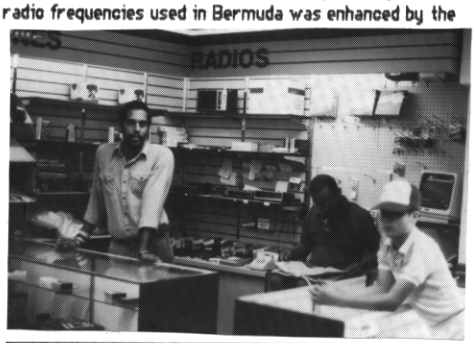
I also managed to stop by the police station at Saint Georges. It was during this visit that I found out that the Bermuda Police would soon be moving to a UHF radio system. They currently operate on VHF repeaters throughout the island. The new system will consist of several Motorola UHF repeaters located islandwide. They told me they were performing tests of the system then. (That was in June, so the new system may be in operation at this time.) The old VHF system probably would be scrapped, although no one knew that for certain. One of the new Motorola radios was sitting on a desk in the office. It appeared from what I observed there that their old system was quite prone to "hash" from the computer operating at the station.

The officer in charge told me that this new system could not be picked up on scanners. This might be an indication of DVP use, because most scanners could certainly pick up the UHF frequencies. In any case, I left the police station with a great deal more information on their present and future radio systems, than what I had when I came in.

There is plenty of other activity to monitor in Bermuda above and beyond the Bermuda Police. There are agencies such as the amateur radio repeaters operated by the Bermuda Radio Society, the Bermuda Fire Service, the Bermuda Regiment (Military), as well as Saint Johns Ambulance, the Bermuda Public Works Department, Bermuda Customs, Cable & Wireless (Mobile Telephones), a variety of taxi and motorcycle companies and the local bus company, to name just a few. There is something for every interest. You can even eavesdrop on the Bermuda Naval Air Station (U.S. Military). Elsewhere in this publication is a list of frequencies that I monitored while in Bermuda.

Bermuda also has its share of commercial broadcast stations which include 5 AMand 3 FM stations and 1 television station (Channel 10). Strangely enough in this country with a strong British background, Channel 10 is a CBS affiliate station. Soon another television station (Channel 12) will be on the air. Using a Regency MX 7000, I was able to monitor all activity with the exception of the television station.

Like all good things, the shore time on Bermuda would eventually come to an end. However I had not given up on my radio equipment. Even as the island was fading from sight I was conducting a conversation with Eugene (VP9 LNW), a local amateur, via one of the two-meter amateur repeaters. As luck would have it, he was a scanner buff and had collected a lot of data on Bermuda as well as other areas in the world. Thanks to Eugene, my list of radio frequencies used in Bermuda was enhanced by the



Many times the local radio store will have information on frequencies to scan in the area. (NHS)

contribution he mailed to me a few weeks later.

BACK AT SEA ONCE AGAIN

While out to sea, I was able to look about the ship and spot other types of communications gear, including pagers and UHF hand held-radios. Although I did not determine the specific frequencies used by the hand held radios, I was able to do further research upon reaching home, and I did locate four UHF frequencies licensed to Royal Caribbean Cruise lines. I hope that someone reading this article may have a chance to monitor those frequencies and report back on their activity, or lack thereof, on board ship. The frequencies licensed to Royal Caribbean are 467.550 MHz and 467.575 MHz in the General Mobile Radio Service (call sign KAD 1006), and 461.525 MHz with an associated mobile frequency of 466.525 MHz in the Industrial Business Radio Service (call sign KNHL 493). This latter pair is licensed specifically to Miami, Florida, although the radios could easily be used on board ship once out to sea. If anyone gets a chance to monitor these frequencies, and finds them active on any RCCL ship, be sure to let me know, and we will issue an update to this story.

Since monitoring frequencies in a strange land is not a top priority for taking a cruise, it is not a bad idea for a hobby radio buff to take along some gear to listen in to the locals when time permits. I will have to admit it was hard to find time to listen to a radio while trying not to be late to the 13 daily meal calls on board ship. With a little persistance however, it can be done. So the next time you take a vacation on board ship to some exotic part of call, take along your radio equipment and enjoy the locals via the radio waves. *END*

LATEST WORD ON COUNTY PRINTOUTS

BY: Norm Schrein

As of October 12th, I have been able to recruit another person to assist in the production of the county printouts that many of you have been patiently waiting for. It is our hope that the backlog will be very quickly cleaned up. Our current staff now consists of myself and two others working part time on the long list of county printouts.

FOX MARKETING OUT OF SCANNERS: SERVICE TO CONTINUE

Fox Marketing of Dayton, Ohio will no longer be manufacturing scanning radio receivers acording to Bob MacDougall, a company spokesman. The company which has manufactured a variety of products over the past several years, including radar detectors and CB radios, did not cite a reason for leaving the market, but it appears that the restructuring of the company's product lines was a major factor. Fox had manufactured two scanners over the years with only one model, the BMP 1060 having any degree of success. The 1060, was a ten-channel FM programmable unit that also featured 60 pre-programmed frequencies. The company also manufactured another model known as the Fox Pac. This unit depended upon chips that were programmed by the dealer rather than user programming from a keyboard.

Fox indicated that they would still provide service on both units.

COUNTY PRINTOUTS (CONTINUED)

VIRGINIA	WASHINGTON
Accomack	Kitsap
Culpepper	
Farquier	WISCONSIN
Northfolk	Greene
Northampton	

Of course there are several states in which we have all the counties researched. Included in this list is Alaska, Arizona, Hawaii, Guam, Nevada, Ohio, and Puerto Rico. If you have an interest in any of these counties or any of the hundreds of others in stock, they can be ordered from:

Mr. Scanner
P.O. Box 291918
Kettering, OH 45429

NEXT MONTH IN THE RADIOGRAM

Next month we will look at the Consumer Electronics shows that are held twice each year -- why so many manufacturers flock to these shows, and what they hope to accomplish at the very expensive expositions.



The CES Show in Chicago, Illinois draws over 80,000 people to the city each June. (Photo - Norm Schrein)