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Alaska Earthquake/ Tsunami Prep



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Alaska Earthquake/Tsunami Prep

By Todd Dokey KF6AWG

Living in southeast Alaska is always interesting. Killer whales, seals, eagles, ravens, and brown bears (a cousin to the grizzly bear) are abundant. Radio up here is interesting too. The first night I hooked up my HF gear, I heard nothing. Not just a few minor things, but nothing, as in, "I have a short in my coax," nothing. But, within two hours the atmospherics had changed, and I was hearing things all over the hemisphere. I'd never experienced that before.

Another thing I'd never experienced first hand was a bit more jarring. It was the night of January 4, 2013; an earthquake, measuring 7.5 on the Richter scale, struck in the Pacific Ocean, about 200 miles to my south. The town was shaking a bit and there was a rumbling, which is something I'd never heard before in any quake in which I'd been in California. The rumbling was a bit creepy, it sounded like a 1950s science fiction volcano movie.

This reminded me of the 1989 Loma Prieta quake in the San Francisco bay area. From that experience, and living on the Alaska coast, I guessed that we'd have a tsunami evacuation and I wondered how big the quake was, and how far away.

Things moved pretty quickly. I got up and got dressed the minute the quake stopped, and tuned my marine VHF to the National Weather Service (NWS) frequency, since they do the emergency broadcasting with SAME alerts. Then it started.

The phone (of all things) was first. Flashing a warning. It was the NWS message, Tsunami Warning, Mandatory Evacuation to High Ground. No sooner did I say to myself, "It's on! It's the real deal!" than the VHF started to beep, "Station (Juneau NWS) will be on the air momentarily..."

Then they gave the same order. Although I did not feel panic, I must have had some reaction, because I felt a bit lightheaded as I stared at my gear on the bed. One word came to mind, "MOVE!" The NWS messages said that wave arrival time in Sitka was 12:45 a.m. local time. By then, it was already 12:25 a.m. and still there was no word on how big the wave might be.

"Earthlings, You are Doomed!"

The time to turn off the VHF radio came when the tsunami warning sirens popped off



Bald Eagles congregate at Sitka.

all over town. I grew up with air raid sirens, so that was not too startling, and I expected it. But, these are the new ones, they also talk. It was a little creepy. Again like a 50s science fiction movie, as this deep booming voice kept repeating, "THIS IS A TSUNAMI WARNING. EVACUATE TO HIGH GROUND IMMEDIATELY!" It echoed from multiple devices all up and down Halibut Point Road and beyond. The voice was omnipresent, and although informative, made me a bit more nervous.

I hear there was panic in places around town, but nothing huge or out of hand, so I guess not everyone had notifications on their phones. Still, the voice was very creepy to me, sounding a lot like, "EARTHLINGS, SURRENDER, YOU ARE DOOMED!"

I stepped into the hallway and turned on the light, lighting up the living room well enough to see. Added effects came from hearing traffic outside as people headed toward the tsunami evacuation point; flashing lights from police cars and fire department vehicles moving about making sure people got where they needed to go. It was all a bit odd, and I took a few breaths, forcing myself to focus.

My main concern was my pets. I at least had their cages, so I began to get them ready. I loaded up the Blazer in the driveway in a sort of "stream of consciousness" state. Pets, survival pack, oh yeah, that bag of toilet paper could come in handy. I also grabbed a zip-lock bag full of cigars an old Navy friend had given me at Christmas.

I had built an SGC 2020 transceiver into

a top-loading Pelican case recently. Everything up here is subject to the weather of the southeast Alaskan rain forest, so it seemed to me to be a good idea to have a kit that was waterproof. While I have a Technician Class license and may not have been able to transmit, I knew it would be important to be able to monitor all emergency HF frequencies in order to relay such information to local emergency authorities. As it was, I almost forgot it, but my brain caught me on my way to the car, "Get the radio, stupid, it's ready to go!"

The tsunami evacuation point was up the hill from me, at one of the local schools so, for me, the trip was short. There was enough traffic flowing in from around town that the Sitka Police Department was busy directing people to the remaining open parking.

For others, it was a trip across town. One co-worker picked up a lady and her daughter, who had just moved from North Carolina. They were walking down the street with their possessions in trash bags and said they did not mind walking. He insisted they get in the truck and took them up the hill. Had this been a big wave tsunami, they would not have made it to high ground in time.

When I arrived at the school parking lot, it was getting full and I could see the auditorium area was where most people were. There were cats in cat carriers, dogs on leashes, kids running around, and lots of people. I saw stacks of MREs (Meals, Ready-to-Eat) and other things someone had pre-positioned.

My favorite "emergency" deployed guy, was a motor home that had come up to the parking lot. Generator running, the owner was inside at the dining room table, a cup of coffee at hand and his laptop going. Internet and cell service did not go out, so lots of people were "Facebooking" the event.

After standing around a bit, taking in the situation, I walked over to the EMT truck, which had several members of the Sitka fire department working traffic and dealing with what came up. I spoke to the man in the truck, mentioning that I had a ham radio with me. He was interested and contacted his IC (Incident Commander) by radio, and after a short discussion of my having been in ARES and Races and having worked floods and

CANADIAN ARES NETWORK

	SSB		CW		DIG	
BAND	FREQ	TAC	FREQ	TAC	FREQ	TAC
80 M	3.675	Alfa	3.535	Golf	3.596	Mike
40 M	7.135	Bravo	7.035	Hotel	7.096	November
20 M	14.135	Charlie	14.035	India	14.096	Oscar
17 M	18.135	Delta	18.075	Juliet	18.096	Papa
15 M	21.235	Echo	21.035	Kilo	21.096	Quebec
10 M	28.235	Foxtrot	28.035	Lima	28.096	Romeo

EMERGENCY FREQUENCIES

(Emergency FRQ in bold)			
Description	Frequency	Mode	Time
Alaska Statewide	5,167.50	USB	
Canadian Net	3,775.00	LSB	
Canadian Net	7,050.00	LSB	
Canadian Net	21,130.00	USB	
AK Prep Net	14,292.00	USB	0830 AST
Sniper's Net	3,920.00	LSB	1800 AST
Bush Net	7,093.00	LSB	2000 AST
Motley Group	3,933.00	LSB	2100 AST



other emergencies back home, they wanted me to see what I could find out.

Fortunately for me, we'd had another alert a month or two prior, when a big quake hit off the coast of Canada that had not required evacuation. At that time, I realized that if I did have to evacuate, I had no idea of any of the emergency frequencies for the region. I made up a card with all the emergency nets on it, from Canada through Alaska.

I pulled out a Hamstick antenna, hooked it onto the mount I'd put on the luggage rack, and then hooked that to black case on the hood of my car. I patched in the gel cell for starters figuring that if this went longer, I could use the vehicle battery.

I switched on the 2020, and the familiar sounds of HF began pouring out of the radio. I searched the Alaska frequencies I had found, and then the Canadian. Then I hit the Alaska Emergency frequency. Then, being diligent, I went back through several cycles and parked on a few frequencies just in case. Then I swept 20 and 40 meters: all quiet. No nets or traffic heard.

I reported back to the department that I found no emergency traffic from known Alaska nets, or Canadian nets. The Alaska Emergency channel (5.167.5 MHz USB) was also quiet. It was then that they asked me to meet with their emergency coordinator the following week to discuss using ham radio in Sitka during a crisis.

We were finally let go around 2:20 a.m. The tsunami wave that reached Sitka, was only about 6 inches above normal wave height, and I got home a while later due to traffic. Once home, I began to review the night's events. What it came down to was that I had about 15 minutes to load out, which made me feel very unprepared. So, I started making a checklist and bundling equipment.

When I lived in California, I responded to several ARES/RACES events, so I was up to speed on what to have ready. Yet, I discovered, that there is a huge difference between being prepared to go assist quickly (react), and the need to bug-out now (act)! I am sure all the tornado alley folks are laughing at me at this point. I was ready, but also not ready.

Follow-up City-Wide Drill

Within a month or so after the tsunami quake, a multi-agency emergency communications drill was held by the Sitka Fire and Police departments. Other participating agencies included the U.S. Coast Guard, Army National Guard (ANG), U.S. Department of Homeland Security (DHS), U.S. Forest Service, Sitka Mountain Search and Rescue and the Sitka Community Hospital. Sitka City offices also participated, as they are responsible for the electric grid, etc. KCAW radio also participated, bringing their own portable transmitter that could be deployed in an emergency.

The weekend-long event took place at Keet Gooshi Heen school where the group took over a

Panoramic view of the Pacific Ocean from the author's former backyard. The dominant island on the right is Middle Island with the snow-capped Mount Edgecumbe volcano in the background, a Sitka signature item.

conference room for use as a Command Center. My participation was as "the ham guy."

The final day of the exercise, the one in which I participated, was a full on test of equipment. The DHS had a nice new trailer, which contained a satellite link, generator, computer and networking equipment, and was used to provide WiFi for the Command Center. Air Station Sitka (USCG) was on hand with their rescue helicopter, and also had representatives from Juneau present. They also had a big black box, which was a portable, field radio system.

The Army National Guard unit, in my opinion, had the best overall preparation for the drill. They had brought along some mobile radio equipment and some HT radios that were programmable on the fly. During the administrative meetings of the previous day, they had agreed on an overall band and channel plan, this was programmed into the handheld radios, which made communications much easier between agencies and departments.

One of the ANG's black box radios went into the USCG helicopter and was linked to a matching ground unit. This provided a multi-channel, bi-directional link if needed. For the exercise, various members of each group were scattered about the city and borough. From a team on Harbor Mountain, to some foot patrols on the other side of town on Sawmill Creek road. Mountain Rescue also had foot teams out and, as I recall, the weather was a bit on the rainy side from time to time that day, so it made for a realistic southeast Alaska scenario.

After everyone in the field was in place, a radio check occurred. Communications with the Command Center and between field units was drilled. Then, on notice from the IC, Al Stevens of Sitka Fire, the power was cut off, and we were all to operate on portable power.

There was a generator for the main room and various agencies had their own as well. Since I was running on battery power anyway, I did not need to switch over. There were further exercise components after this, that I did not participate in, and so my final contact with the people in the

drill was the after-action meeting that night at Sitka Fire's conference room. The verdict was, that it had all gone off much better than anyone had thought it would.

Lessons Learned

Even though you may have all the equipment for an event like this, it needs to be in as few bags or packs as possible and all in the same area. It really does need to be as close to the door as it can be, or already in the car. Side trips to this closet or that room, just to grab a duffel bag, is a total waste of your time. So, owning the gear is not enough, it's got to be ready to deploy.

Transporting the pets was a huge time eater. I'm not saying don't take them, but I am saying, be ready so you can move fast. My friends with young children said the same general thing of the kids. They grabbed their gear OK, but it took what seemed like forever to get the kids out of bed, dressed and into the car seats ready to go.

A survival kit for the wilderness is not a bug-out bag. So, I've since spent time equipping the vehicle with various items to use in a protracted stay away from home. I found that, although I could think clearly enough, the extra mental harassment from the sirens, the Voice of Doom notifications, the traffic noises, the panic stricken friends on the phone, and flashing lights sweeping through the room, distracted my attention. So, I put a bug-out checklist by the front door. Do the list, get out in time, alive and prepared.

As for radio equipment, it's best to have what my friend Doc would call a "throw down radio" to take with you. In other words, the radios need to be ready to roll, and possibly, to be sacrificed.

I know, many of us have mobile radios set up, but here it would have done no good to talk on the local 2-meter repeater. I can't reach nearby repeaters due to mountain ranges and island topography. So, for me, 2-meters and 70 cm are out of the picture. Marine VHF is good, since every boat from a skiff to a seiner fisherman, trawler or crabber has VHF. HF becomes the key for long-haul radio traffic into and out of the area.

Reading up on emergency power and other ham radio emergency preparedness is important but requires thinking about fundamentals. A nice "gee-whiz" solar panel or other solution is cool, but is it waterproof? Is it rugged enough to deploy for a long period of time? Have you put it to use in abusive conditions? Would you let your life depend on it? Things that are easy to locate may be more "old school," but they are dependable and available? In an emergency, that may be all you get.

Since the event, I also purchased three SAME radios. One for my office, one next to my bed and one as a gift for a friend who lives on an island off the coast, and did not hear any of the tsunami sirens.



Todd's SAME WX Radio

