

## Another Unique EMS Run on Beaver Island

This is another imaginary ambulance run with no information about a particular patient.

It's a beautiful, sunshining and starting to warm up. Unfortunately, the warm up on this spring day, while welcomed, also has caused the sun to disappear behind the fog, as the dew point and the temperature become the same.

The pager goes off. "Beaver Island EMS, respond to Lake Geneserath, the Ducky residence for a 76 year old male with chest pain and difficulty breathing."

"Central, 57 Echo 4, is in route," I respond as I walk out the front door, open up the vehicle in the driveway, start up, turn on the overhead emergency lights, and pull onto the Kings Highway heading south. Our Beaver Island EMS has designed a unique two-tiered response that allows the paramedic on duty to respond immediately and directly to the location of an emergency. The emergency response vehicle, the Echo car, is enroute to the emergency before the second page is finished.

It's getting foggier by the minute. "Echo 4, 8780. Can you pick me up at the intersection?" A little geography lesson is necessary for the reader to understand this whole situation. The Kings Highway is the main artery from north to south on the Island. It is approximately five miles in length from the harbor area to its end. The pavement ends at the end of the Kings Highway with an intersection with a gravel road going east. This is the intersection mentioned in the radio transmission.

"Be there in a minute or two," Echo 4 responds on dispatch frequency.

Echo 4 stops and picks up the MFR/Firefighter and teaching colleague at the intersection of Kings Highway and McCaulley Road(1 on the map). "I missed the info on the call," my MFR friend Tim, who is not schedule to be on call, exclaims. The McCaulley Road takes us over to the East Side Drive. We turn right sliding around the corner and now headed south(2 on the map).

"We're headed to Lake Geneserath for a difficulty breathing with chest pain," I say, "and we're quite a ways from there. Boy, is this road bumpy and muddy." The Mud Song runs through my brain and sneaks out, "Mud, mud, glorious mud. Nothing quite like it for soothing the blood." I stop as my bottom jaw snaps up and hits my teeth of the upper jaw. "That felt like I got punched in the jaw when we hit that pothole. I'm going to have to slow down a little bit, or we'll get beat up." (3 on the map)

"Yeah, that really is a big pothole. My head hit the roof of the car. Hope I don't have a concussion," Tim says jokingly. "What do you think might be going on? Heart attack or what?"

"Don't know really, but we'll have to take in the stuff we need since we'll get there before the ambulance. We're gonna need the green oxygen bag, the blue jump kit bag, and the run box with the run report form. Our patient DOES have a cardiac history, so it's certainly a good possibility. We should

be there in about fifteen minutes,” I chatter out while hitting the potholes on the East Side Drive headed south.



Tim says, “Did the ambulance call in service? I haven’t heard anyone pick up the rig. Who’s on call?”

“I don’t know, but it usually takes a while for everyone to get to the garage. I did hear Don, a first responder, and Bob, an EMT, call enroute to the garage.”

Just then, we hear on the radio, “Central, 87 Alpha 2 is in route to Lake Generserath.” This is ten minutes after the Echo car departed, and the Echo car is halfway down the island. The distance can’t be very long since the island is only fourteen miles long, but on the potholed East Side Drive traveling at more than thirty miles per hour is impossible. Echo 4 is running lights and siren down the East Side Drive at between ten and thirty miles per hour. We have to respond with the due regard for the safety of others and still try to get to the scene of the emergency in a reasonable amount of time. The ambulance is ten minutes and five miles behind us.

As we continue down the East Side Road, Tim says, “Where is Nomad Corner? Remember the time we were headed down here for the emergency at Lake G during the winter a couple of years back? The echo car got there first, but the ambulance went off the road at Nomad Corner. Do you remember that?”

“Yes, I do. I remember the patient and his wife asking about what they heard on our radio. I had picked up an EMT just north of your house, and we were headed down to this same residence. Oh, I forgot, you didn’t get the dispatch information. We are headed to that same house, the Ducky residence for the very same patient, I think. I remember that someone had to flag down a ride heading north, and stop at the East Side Fire Hall to pick up our backup ambulance. We had to wait forty-five minutes with our cardiac patient until the backup rig got here. The other ambulance was buried in the snow bank at Nomad Corner. Come to think of it, why don’t you warn the rig of the big pothole we hit just past the McCaulley-East Side Drive intersection. AND, tell them to slow down. We don’t want them go off the road with all these potholes. Just give them a heads up,” I said.



Tim called them on the radio. As he began giving them the warning, the ambulance called back, “Break, Break, break, you’re warning is well received. We already hit the pothole in question, and we think it’s kind of funny that you, Tim, are warning us about Nomad Corner.”

There was no radio traffic for a few moments, and we safely made it around the Nomad ninety degree Corner. "Everyone knows?" Tim said, "How do they know?"

I reply, "It's a great story. It just shows that the most experienced driver in the world can end up in a snow bank given the right conditions. Anyway, we're almost there. Central Dispatch, 87 Echo 4 has turned onto South Arm Road. We have the residence in sight. Echo 4 is on scene."

"Tim, if you'll grab the equipment, I'll get in there and assess the situation and the patient," I say, grabbing my stethoscope and BP cuff.

I walk up to the door and knock rather loudly since I know these older people have a hearing issue. "Come on in. We're upstairs," the elderly lady states. Her husband, our patient, gruffly and with difficulty says, "Be .....care.....ful.....of the.....rugs." Just as he says that, my right leg slips out from under me and I land on the kitchen floor on my glutes, making a definitely audible thump. "I.....told.....you.....to be.....care.....ful.....of the.....rugs!" our patient, barely audibly, states.

The elderly wife says, "Sorry about that. I just waxed the floor yesterday. It is a little slippery."

I grab the seat of the kitchen chair, dust off my dignity, and get off the floor. "Is there anything else I should be aware of, Ducky?" The wife replies for him, "No, Grumpy Ducky just needs some help up here."

Just as I get myself off the floor, Tim comes in with a big grin on his face. He says, "I'm pretty sure that this story will get itself around to everyone to. What does 8740 do when he arrives on the scene? The first thing he does is sit down on the job." His smile is going from ear to ear with a big show of his teeth and a chuckle, two or three, come out of his throat.

"You want to follow me upstairs and get a set of vitals and a pulse ox reading while I check his breathing and breath sounds?" I ask as we both go up the stairs.

"So what's up today, Grumpy?" I ask as I walk up to the patient sitting upright in a chair by the bed. I can see his work of breathing before I use my stethoscope. "I.....can't.....breathe.....I ....can't ....seem.....to catch.....my breath." "OK, Grumpy, I'm going to listen to your lungs." I say, "Big breath now. Another. Another. One last one. Well, we've got some really wet lungs sounds here. What is the pulse ox reading?" Tim points the meter to me, and I read off the 85% reading. "I'm going to put some oxygen on you, Grumpy, and we'll see if that improves your breathing."

Vital signs were recorded as blood pressure 160/100, pulse rate 96 and irregular, and respirations of about 30 breaths per minute. "Have you been sick?" I asked because he feels a little warm and sweaty. Grumpy nods his head.

The wife says, "He's had the intestinal flu for last week. Can't keep anything down including his pills and had the runs for the first couple of days. He's been able to eat the last two days, and he not been very grumpy, much less than normal. That's how I know he is sick. Does he need to go to the hospital?"

"I'm pretty sure you should pack a bag. It's very likely that he'll need to go to see his cardiologist at NM Hospital. We'll know more after we do a few more things. To Tim, "Is the oxygen helping his O2 sat?"

"Tim, can you go down and get the cardiac monitor for me, please?" I asked. "Now, Grumpy, how many days since you've taken your Lasix and your other medications?"

"More.....than.....a.....week!"

Tim says, "O2 sat is at 92 on nasal canula at four liters per minute. I'm on my way to get the monitor."

I hear, "87 Alpha 2, turning on South Arm Road. We see the Echo car. Central, we're on scene."

"87 Alpha 2, on scene, " Central Dispatch acknowledges. "Alpha 2, we're going to need a stair chair up here on the second floor as well as the cot inside at the bottom of the stairs," I almost jumped on top of the Central radio traffic with my thoughts moving much faster than the possibilities.

"Grumpy, can you give your chest pain a number for me, with zero being no pain and ten being the worst pain you have ever felt?" I asked. "And where is the pain?"

Grumpy pointed to his left chest and then up to his left jaw, and he said, "Ten!"

"Has it gotten better since we gave you the oxygen?" I asked. Tim arrived with the monitor.

Grumpy nodded. "So, if it's a ten now, what was it before the oxygen?" Grumpy said, "Fifty!"

"So the oxygen has helped?" I asked as I put on the monitor. Grumpy nods yes, and I say, "Grumpy, I want you to put yourself in your happy place. Breathe deeply and try to slow your breathing down a little. I'm going to run a 12-lead EKG."

I put in Grumpy's age into the 12 lead, and started the machine. In the meantime, I hear from the crew downstairs, "We're here with the cot and the stair chair."

"Thanks, we'll have you come up in a minute or so," I said as the 12-lead prints out. I am immediately alarmed because of the words written on the printout, "ACUTE MI SUSPECTED." "Grumpy, can you chew up these baby aspirin for me?"

Luckily, we are an ALS agency. I ask the EMT to come up and set up and IV for me. "Grumpy, put this under your tongue and let it dissolve. It's a nitro."

"Grumpy, it might give you a headache," I say as I put the pill under his tongue. "Ok, now I need to start an IV. Thanks for setting it up for me, Karen. You're going to feel a poke in your left hand.....right now."

Once the IV was secured and the fluid was running, I asked Grumpy, "What's the number now? Remember that the worst pain is ten and zero is no pain."

Grumpy responds with his left hand and all fingers extended. "Good, the nitro helped with the pain."

“Grumpy, do you think you can stand up for us to get you in a chair?” He nods yes. “Okay, bring up the stair chair.” As the rest of the crew comes up the stairs, I’m very happy that we have had all of these people respond. We get Grumpy to stand up, shuffle over to the chair stair, and sit down. We strap him into the stair chair.

We have three EMTs, two first responders, and me. “OK, the stair chair is going to slowly lower Grumpy down the steps, so we’ll only need two people on the stair chair. I’ll be behind Tim going down the stairs backwards. We need someone to carry the monitor, one to carry the oxygen bag, and one to hold the IV as we go down the stairs. I grab onto Tim’s belt to help stabilize him as he backs down the steps. The choreographed movements by all six of us could represent a slow classical waltz as we move down the stairs. “Keep your arms in, Grumpy. We don’t want to break an arm getting you down the steps, and I don’t want to lose that IV.”

We make it down the steps without any problems, and move him over near the ambulance cot. “Hey guys and gals, can you get Grumpy all set and on the cot for me, please? Then we need another set of vitals signs. I need to call medical control on the phone and fax them the 12-lead ekg.” I trust all of these EMS providers to get the job done and get the patient ready to leave the house. I ask the patient’s wife to use their telephone. I call the local medical control and ask to speak to the ER physician.

I provide a patient report with the information from the assessment including the new set of vital signs. I request orders for setting up a nitro drip and for Lasix IV. Dr. Olcomb says, “Sounds good to me. I don’t think you’re going to get in here to Charlevoix. It’s really foggy here. The patient should go to Northern anyway to see his cardiologist up there. Hope it’s clear up there. Continue your protocols including some morphine if your patient needs it. Call us back if you need anything more or if your patient’s condition changes.”

We are now at least 30 minutes away from a flight off the island. It is time to have the most experienced EMT get on the horn and make some arrangements. I ask, “Terry, will you see what kind of transportation we can get to get Grumpy to the hospital, please?” Terry makes the first phone call to the local airport air taxi service. The weather is too foggy for them to fly. Terry tries the air transport out of the Upper Peninsula, VM. Terry says, “They said they will have their pilot check the weather and they’ll get back to us. I gave them Central Dispatch’s phone number because I assumed you want to leave here and head to the airport.”

“Good job, Terry! Okay, folks, are we ready to load up? Have we got Grumpy’s medications? We’ll continue our assessments and treatments in the back of the ambulance while we’re heading for the airport,” I say.

“We’re not going to the medical center?” Karen asks.

“We’ll see how the time and transport arrangements go,” I say. “There isn’t much of anything that the med center can do beyond the ACLS and ALS treatments that we can give right here in the ambulance. If

it's going to be a long wait for transport, then we'll head in. No sense driving 8 more miles on bumpy roads unless we need too."

Assessments and treatments continued in the back of the ambulance as we headed north on the East Side Drive. We had been into this call for over forty-five minutes when Central Dispatch called us on the radio, "87 Alpha 2, Central Dispatch."

"Go ahead with your traffic, Central," the driver responded.

"Your air transport pilot is not clear for flight due to the weather. You can call them back in a couple of hours to see if the weather has changed," Central stated.

"Clear on this traffic, Central," our driver stated.

"So now what?" Tim asked me.

I didn't have to answer because Terry said, "I'll get on the radio and call the Coast Guard."

As we continued providing care to our patient whose pain was now at a 1 out of ten and had a oxygen saturation of 94% on 4 liters per minute of oxygen, Terry talked on the radio.

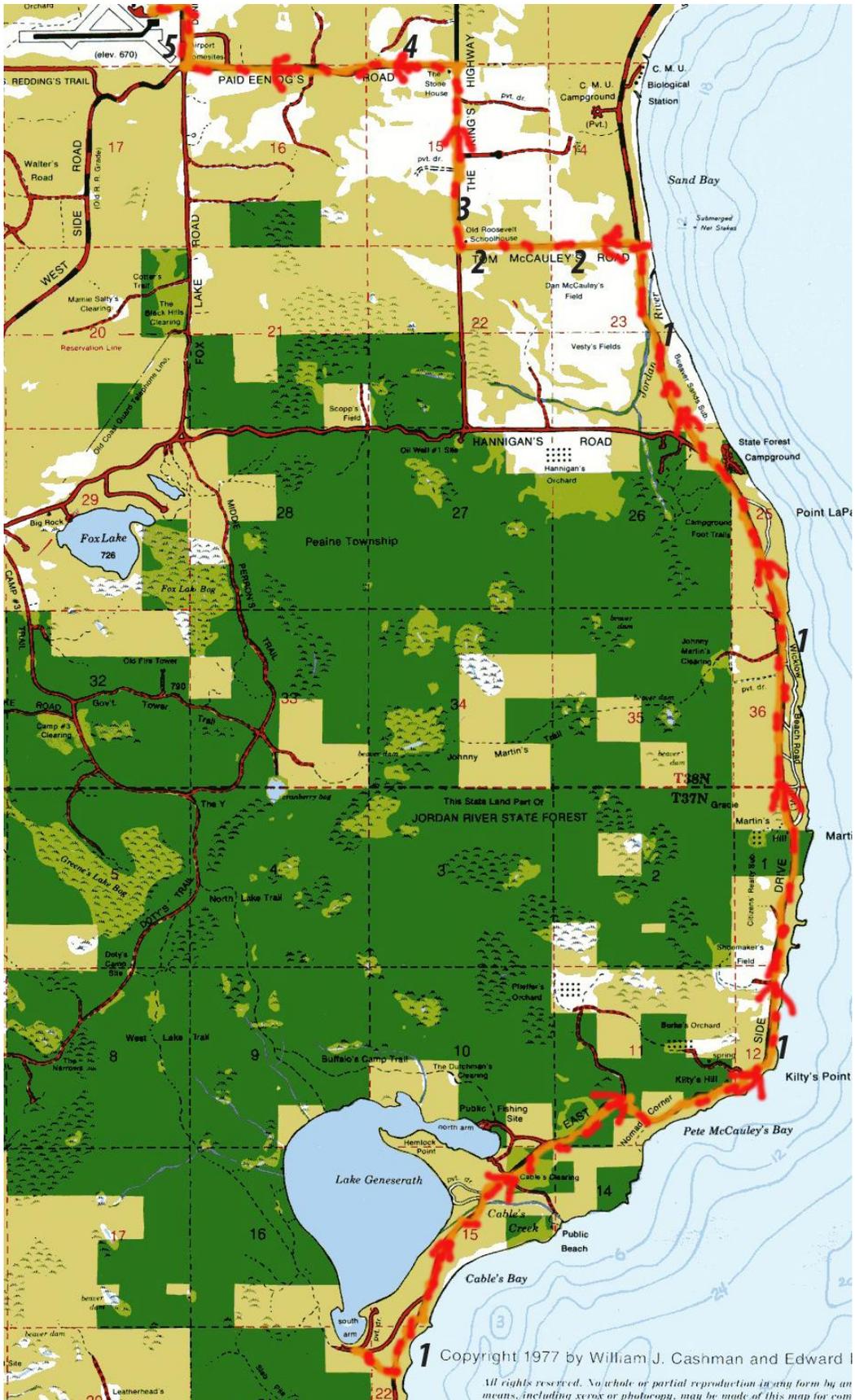
"Group Soo, Group Soo; Beaver Island EMS on Channel 16." Terry paused to await a response. Group Soo responded, "Beaver Island EMS switch and answer Channel 21 Alpha." Terry changed the channel on the ambulance radio. "Group Soo, Beaver Island EMS," Terry called. "Go ahead with your traffic, Beaver Island," Group Soo answered. So, using the marine radio frequencies, Terry got the USCG alerted. Group Soo called District Nine in Cleveland on the phone while we continued to head toward the Beaver Island Township Airport. Fairly soon, a patient report was given to the Flight Surgeon, and the mission to launch a USCG helicopter out of Traverse City was authorized.

Group Soo called on marine channel 21 Alpha, "Helo has launched and should be on the ground at the Beaver Island Airport in 30-35 minutes. Stand by this frequency for any updates."

"Roger, Group Soo, Beaver Island EMS is standing by on channel 21 Alpha," Terry responded.

The decision to head directly to the Beaver Island Township Airport was one made by the paramedic on duty. The transport of the patient from Lake G to the airport would follow the roads in this order:

1. East Side Drive to
2. McCauley Road to
3. Kings Highway to
4. Paid Een Ogs Road. Paid Een Ogs Road west end ends at the township airport property. A quick turn right onto
5. Donnell Mors Lane takes you to the airport drive.



The radio was quiet for the rest of the trip to the township airport. There was, however, a lot of conversation in the back of the ambulance. "It looks like it might be clearing a little," Tim said looking out over the lake as we went up East Side Drive.

"Still can't see the mainland though," Terry said. "This equipment isn't going to be much fun in the helicopter. Let's see. We have a cardiac monitor, the IV, the IV pump, the oxygen, the drug boxes, and the jump kit. You going to need all of them, aren't you?"

"I can't see us leaving anything behind. Can you?" I said. "It's a lot of equipment for just one of us to monitor, let alone carry."

Terry said, "Oh, that's right. Only one of us is allowed to fly on the helicopter, and it will have to be the medic. Right?"

"Yes, and you guys will have to clean and restock the ambulance. You'll also have to hope that there isn't another ALS call while I'm gone. I don't know when I'll get back, " I said. "But you can bring the patient to the medical center if you need any ALS treatments. They do a good job there, but depending on the patient's condition, one of them might have to fly with the patient. I'll get back as soon as I can."

Right then, we were pulling in to the township airport. "Beaver Island EMS, Helo 6578," the radio crackled. "Beaver Island EMS, Coast Guard Helo 6578 on Channel 21 Alpha."

"6578, Beaver Island EMS on Channel 21 Alpha, go ahead with your traffic," Terry responded. "Helo 6578 is approaching SJX (the Beaver Island Township Airport designation). We should be on the ground in three minutes."

"Roger, 6578, Beaver Island, clear on that traffic," Terry stated. "We better get inside the terminal and get the patient ready for the flight."

The ambulance backed up to the terminal door, the patient was rolled out of the ambulance, and the equipment and the ambulance cot was rolled into the terminal. This was happening at the same time as the helicopter was landing and taxiing to the tarmac.

"We will have to place the patient on a folding cot," Terry began directing the other EMS people in moving the patient. The patient was moved from the ambulance cot onto a folding cot while managing all the wires and IV equipment and then the patient and folding cot were placed back on top of the ambulance cot. We were now ready to take the patient to the helicopter. The helicopter had shut down, and the USCG crew entered the terminal building.

"Who's going with us?" was the first question asked as they entered.

Terry responded, "Our medic will be going with you. This is Joe, our medic. He weighs 250 pounds. This is the patient, Grumpy, and he weighs about 200 pounds. We are ready to load the patient when you are ready."

"Does all of this equipment need to go?" the crew member asked.

It was my turn to respond, "Everything here needs to go. The monitor, the IV pump, the drug boxes, the oxygen bag, and the jump kit. I have the pump set and it's running the dose ordered by medical control. The monitor is keeping track of the cardiac rhythm, the patient's pulse, blood pressure, and oxygen saturation. The urinal is ready in case the patient needs it. The drug boxes are essential in case the patient's condition changes, and I have to have the equipment in the blue bag for the same reason."

"It's going to be a tight fit," the crewman responded. "We will wheel the patient out to the helo. I see that the patient is on a folding cot, so we will load the folding cot with patient and equipment into the helo first. Then the medic will climb in. We do NOT have room for any family. We have headphones for the medic and ear plugs and headphone for the patient. Are we ready to go?"

The headphones and the ear plugs were placed, the patient with the medic and three EMS providers wheeled the ambulance cot out to the helicopter, and the patient and equipment was loaded into the helicopter. It truly was a tight fit. One of the crew members had to put the monitor on his lap. I had to put the oxygen bag on my lap with the two drug boxes behind me and the blue bag put next to me. Luckily, the IV pump and IV were able to hang from a clip on the wall of the helicopter.

My headphones had a microphone built in and was plugged in, and I was live on the intercom with the rest of the crew members. "If you need us to do anything, or you need to tell us something, press the button and just talk," the crewman stated. "I'm an EMT, so direct your requests to me if they have anything to do with patient care."

My first question after the helicopter lifted off was, "Where are we going? I need to give a patient report to the receiving facility."

The EMT crewman responded, "We are going to Petoskey. Harbor Springs Airport is foggy, so is Charlevoix. You wanted to go to Petoskey, didn't you?"

"Yes, but I just didn't know where we were going. Where are we going to land?" I asked.

"We'll find a field or a parking lot to land in. We'll have an ambulance meet us. You don't have to worry about this. You just take care of your patient, and we'll take care of the landing and the mainland ambulance," the EMT stated.

Well, that was a load off my mind. We were going to a location near the hospital where the patient's cardiologist was, and I didn't have to worry about the mainland ambulance arrangements. "Is it okay for me to contact my medical control on my radio?" I asked. I had a second headset on my left shoulder attached to my portable radio on my belt.

"Go ahead, but make it short, okay?" the EMT stated.

I called Charlevoix Area Hospital on the HEARN ambulance frequency, and I asked them to call Northern Michigan Hospital to notify them of this patient and asked them to fax the 12-lead and provide a short patient report from the information that I provided to them earlier. I reported the patient vital signs, pulse oximeter reading, and the status of the IV pump drip medication. It took less than a minute. They

asked my estimated time of arrival, but I didn't know that information. I told them that Allied EMS would contact the hospital once we landed. I was assured that this information would be provided to the receiving facility, and I turned off that handheld, took off that headset off, and put on the intercom headset. "All done," I stated.

"Good, we will be landing in the Elks parking lot just down the street from the hospital. We have made arrangements for the Allied ambulance to meet us there. We will not shut down this time because we have another emergency to respond to. Make sure you have everything out of the helo after the patient exchange. We are almost there. You can get out, and help with the patient transfer. Before you are loaded into the ambulance, we will be taking off on our next mission," the EMT stated. "Any questions?"

And down we went to the middle of the Elks parking lot. I didn't see any ambulance, but I had confidence that they would be there shortly. I got out of the helo after unplugging the intercom, set all the unattached equipment on the ground about fifty feet away from the helicopter, and by the time I had that done, the Allied ambulance pulled up. They pulled their ambulance cot out, and I had to shout to be heard over the noise of the helicopter, "The patient is on a folding cot. We just need to put him onto your cot, keep all the wires and tubes from getting pinched, and head to the hospital."

This patient exchange went smoothly with the USCG crew members helping, and, as we loaded the patient into the Allied ambulance, the USCG helicopter took off on their next mission.

Off we went to the hospital. I gave a short report to the medic on the rig, he gave a short report on the radio to the hospital, and in two minutes later we were at the hospital ER. I had no run report to provide the medic since that run report was left on Beaver Island in the back of the ambulance. I did provide the basic information needed for their run report, and we wheeled the patient into the ER room assigned to Grumpy, our cardiac patient. The nurse shoed us out of the room, but I asked before leaving, "When will I be able to get my equipment back?"

She stated, "You wait in the EMS area, and I'll get it to you there. We'll have to exchange all of your equipment for our equipment and it will take a little while. Follow the Allied crew, and they'll get you to the right waiting area."

And off I walked in a strange hospital with two strange medics to an unknown area to wait an unknown period of time to get my equipment. Once again, I'm wondering how Grumpy is doing, what they will do that we haven't done, and how long Grumpy will be in the hospital. Then I began wondering about how I would get back to the island. How would I get the equipment back there? Could I carry all of this equipment? What comes next?

The Allied paramedic Barry showed me to the area where they do their paperwork, an office area with several desks. He said, "I'll go check on your equipment while my partner Jill does the paperwork. We will do our best to get you and your equipment at least as far as the Emmett-Charlevoix County line."

Barry came back with the equipment then went out to clean the rig. "You want to help me make up the cot and get ready for our next run?" he asked me. Then he helped me carry the equipment out to the ambulance. We got everything ready for their next run, loaded BIEMS equipment in on the jump seat, and, by that time, Jill came out and we headed for the county line.

We hadn't left the Petoskey city limits by more than a couple miles when their pager went off. They continued on the highway and dropped me off at the Bayshore gas station. "Gotta go!" Barry shouted as the lights and siren were turned on, and off they went.

Now, I am standing at a gas station with my radio and headset that didn't work, a cardiac monitor, a green oxygen bag, two drug boxes, and an IV pump. Leaving the equipment sitting on the sidewalk, I entered the gas station. "Don't leave that stuff out there very long," the attendant hollered to me. "Last week we were robbed." That was really a confidence builder, I can tell you.

"Can I use your phone?" I asked. "Sure, as long as it's not long distance."

I dialed 911 to speak to Central Dispatch. I told them my sad story of being stranded in Bayshore with all of my equipment, and they said they would ask Charlevoix County Sheriff's Department to provide me a ride back to Charlevoix. I waited thirty minutes more before I called back. "CCSD had all their cars busy on the east end of the county for a car accident. Sorry you had to wait. The undersheriff is on his way to get you." Fifteen minutes later the CCSD car pulled into the gas station.

He said, "You were lucky you didn't get mugged for those drug boxes. We had an armed robbery out here last week."

"I already heard about that," I grumbled. I was downright tired of this crazy day, and I wasn't in a very good mood either.

"Well, you will be happy to know that the fog has cleared off in Charlevoix and probably will clear over the Island shortly. You should be able to get home, anyway," the undersheriff stated. "What do you do on the island besides EMS?"

"I'm a school teacher. I've been teaching on the island for twenty years. I've got lots of papers to grade and lesson plans to write, and I can't do that until this EMS paperwork is done," I moaned.

"Be glad then that you'll be able to get home today. If this was yesterday, you'd be spending another night on the mainland. That is, unless the temperature starts going down to the dewpoint again. It is supposed to warm up a little more, and the wind is supposed to help clear out this fog," he said.

We talked about lots of other things while I was chauffeured from the Charlevoix County line to the Charlevoix Airport. I thanked the undersheriff as he dropped me off with all the equipment at the City of Charlevoix Airport Terminal building. The Island Airways counter staff said, "Too bad you couldn't have waited a few hours. We're getting ready to fly our first flight of the day."

"The patient couldn't wait," was all that I could say.

Island Airways is the only island based FAA certified air ambulance in the Great Lakes. Through an agreement with Peaine and St. James Townships, BIEMS has licensed the certified air ambulance as an air transport vehicle. The weather did not cooperate to use this licensed aircraft on this morning, but it looked like I might get home before the day was over.

I was able to get to the island and finish my paperwork. I walked in the house seven hours after being paged to the emergency. This is ust another day in the life of a BIEMS paramedic on the most remote inhabited island in the Great Lakes.