

20th Anniversary of Hurricane Hugo's Impact on
MUSC
Oral History Project

Interview with Fred A. Crawford, Jr., M.D.
July 1, 2009

Interviewer: Brooke Fox, MUSC University Archives

Location: Ashley River Tower, Room 7030

Brooke Fox: The following is an oral history interview with Doctor Fred Crawford for the Hurricane Hugo Twentieth Anniversary Oral History Project. The date is Wednesday, July 1st, 2009. The interviewer is Brooke Fox. The interview will be taking place in Doctor Crawford's office in the Ashley River Tower.

I would like to start off by asking you, in 1989, what was your position here at the Medical University?

Fred Crawford: In September 1989, I had been Chairman of the Department of Surgery for about a year. I think I became Chairman in November 1988. So, although I had been here for ten years as Chief of Cardiothoracic Surgery, I'd just become Chief, or Chairman of the whole department.

Brooke Fox: The days leading up to Hurricane Hugo and the position that you were in, you probably were involved in the administrative decisions about what's going to happen and who are the essential employees, and all of that. Can you describe what that was like?

Fred Crawford: Just in pretty vague terms, I can remember - daily, sometimes twice-daily meetings during the week or so, and certainly the few days before Hugo, leading up to it; in which we talked about the things you mentioned: the essential employees, how we would provide coverage, what we would do with our patients, were we going to stop admitting, when we were going to stop operating; that sort of thing.

There was significant disagreement among some of the players because, on the one hand, the ideal thing would be to stop operating, stop admitting, stop seeing patients, move everybody out, and prepare for the worst. And if the worst came, then you would be prepared. At the same time, the University was-- like it frequently has been, in a significant cash

flow situation, and every day we didn't operate was bad for the University. Every day we didn't admit or have a full hospital, it was bad for the University because they had to continue paying salaries no matter what. And so it became a tug of war as to how long can you continue to take care of patients without potentially endangering patients' lives. And, help me I can't exactly -- what day of the week was Hugo on?

Brooke Fox: It was a Thursday.

Fred Crawford: That's what I was thinking. I think -- I know we operated on Monday -- I think we operated on Tuesday because I was doing, at that time, a pretty unique, operative procedure in infants and small children; and I had a friend of mine from Chicago who was a cardiac surgeon—a children's heart surgeon, and he came down and stayed with me for two days. He was going to stay for three days. But we kept reading the weather reports and finally he opted out, like early on Wednesday morning. So as far as exact conversations or anything like that, I don't recall, but I do remember sitting in the room with Charlene Stuart, and Stuart Smith, and Marian Woodberry, and a few other individuals talking about how we were going to go about doing those things.

Brooke Fox: So that Thursday morning before the storm hit, what did your Department do to actually prepare? Did you move [unintelligible]?

Fred Crawford: What we started is - as I recall - I guess this would be Wednesday; it may have started as early as Tuesday. We started seeing who could be discharged. In other words, maybe they ordinarily might stay in the hospital for another day, I mean in the hospital, for another day or two, but they actually were well enough, they could go home. So we started discharging people that could be moved out quickly. But then we got into making plans for what do we do with those who are still sick, and have to

be in the hospital. I wasn't really involved in that, but the administration was, as to which hospital they could be transferred to. And transfers began to be made, and I assume most of those by ground, and maybe some by air, I can't remember. And as I remember in vague terms, we got down to about a hundred twenty -- a hundred thirty patients maybe, who were too sick to be transferred, couldn't be discharged, and were with us for the duration.

A number of those patients were in the Cardiac Surgery Intensive Care Unit. A number were in the neo-natal intensive care unit that I remember particularly. And then there were some other patients scattered around the hospital that couldn't be moved for one reason or another.

When I realized that we had a real problem, was Wednesday night, because up until then it was: "well, maybe it's not very big," "Maybe it'll turn," "Maybe it'll do this, maybe it'll do that." I happened to live right on the water in Mount Pleasant in the Old Village, and so the ocean was in my front yard. We'd just built this house about a year before and interesting enough our Architect, who'd built it at the time said there's a fair amount of expense in this house that nobody will ever see because it is in preparation for a major storm, because if you live here long enough you're going to have one. So my house was extremely well built as it turned out, but it didn't float. We ultimately had about a foot of water through the house. The whole front of the house was glass.

And so on Wednesday afternoon and evening, I probably came home a little bit early and we started putting plywood up over all the windows on the ocean-side of the house. Mary Jane called me in the house to look at the news and Linda Lombard was the Chairman of County Council. She stood there and she had this ashen-gray look on her face, like 'We are going to die.'

And at that time they showed the radar of Hugo about to just literally engulf us, and I said ‘Holy – you know, we are in real trouble.’

I grew up in Holly Hill which is about an hour inland, and my folks live there and Mary Jane’s parents lived there at the time. My daughter was in high school. So I said, you know, “First thing in the morning, you’re going to leave and you’re going to go up to your parents.” Which she did, or actually to my parents.

And then I packed up some clothes, and some food and I had a police scanner radio, which ultimately got stolen during the storm out of my office. A few things I thought I would need, and I went back to the hospital early on Thursday morning to begin to make preparations. By that time we had - again this is kind of memory that’s a little fuzzy at this point - we had decided to divide into two shifts as I recall. Those who would come and stay for two or three days, and then the other team, and the rest of them would evacuate, and then at the end of twenty-four, forty-eight, thirty-six hours whatever, that group would come back to town and relieve us. This had been done for nursing, for administration, for physicians and whatever.

Not to sound necessarily melodramatic, but you know, I was the boss and I was the Chairman of the Department, and there wasn’t any choice about what I did. I mean I was going to stay with my people and with the hospital.

And so I came back in, parked my truck on about the fourth floor of the parking garage so it would not be by any windows and not where anything could hit it.

Brooke Fox: Which parking garage? The President Street [garage]?

Fred Crawford: I think it was the President Street, as a matter of fact, because I was parked in the G-lot at that time so I think, you know, I wanted it up off the ground and so I think it was in the President Street parking garage.

And came in and parked myself in the office, and sort of made continuous rounds of all of my units.

Brooke Fox: Which floor was your office on? Which floor of the units?

Fred Crawford: The OR's and my office were on the 4th floor. The OR's, intensive care units and my office, the office of the Department of Surgery, all on the fourth floor. The offices were in the Clinical Science building and the rest was in the main hospital.

But we had patients up on the ninth floor, in what was the Palmetto Pavilion at that time, and we had children in Pediatric Hospital so I'd kind of go around and in some ways I was sort of useless because I wasn't literally on the front lines, because nobody was being operated on which I would have been doing.

And the Nurses and the Residents had things under control, so I'd kind of go around and try to keep morale up, still not really believing that this thing was going to be bad.

And Thursday wasn't very bad, I mean the sun would come out, the wind was blowing maybe twenty miles an hour and it would rain a little bit, and, you know, "Well when is this thing coming? When is this thing coming?"

And by late in the afternoon, it still – the wind was not that strong. So I decided to get some work done. I was on the Program Committee for the American Heart Association and they had sent me a couple hundred abstracts to review for the annual meeting.

So I was sitting in my office and grading abstracts, and I'd grade a few, and get out and walk around, and I'd grade a few, and I'd get out and walk around.

Doug Norcross, who I had recruited just literally months before, he came in July as Chief of Trauma Surgery, was here. And Doug, I know what he was thinking "I've been recruited to Charleston. Now, two months later, I'm in the middle of a hurricane." He did a yeoman's job because we just knew that if it was a bad hurricane then there were going to be a lot of people injured. There'd be a lot of people dying. We'd have all we could do. Turned out that wasn't the case, for obvious reasons. It wasn't so obvious at the time. But he was running around. I was checking on him, and I don't remember who else was in the hospital. I remember Dr. Edwards was here. He was President. He and his wife were in the hospital.

So anyway, at about eight o'clock at night, I'm grading abstracts. The wind was blowing a little bit and it was probably at forty, fifty miles an hour, but my office was on the lee side, the wind was coming out of the south-east to east I guess, because of the spin of the hurricane, and my office was on the west side, so I was sheltered, I thought, from the winds.

One of the nurses who, it was Grady Hardy who ran in. I don't remember what her job was at that time, but she was in nursing. She came in my office and she said, "You got to get out of here." And I said, "Why? No problem here." She said, well down on the, I think it was the first floor,

the office that was comparable to mine at that level, she said all the windows had just been “sucked” out and the ceiling collapsed. And I said “Whoa I’m leaving.” I mean I literally left everything on my desk, got out and locked the door, and not twenty minutes later, the windows of my office were sucked out, all my papers were sucked out into the wind, and the ceiling collapsed on my desk. And without that warning, I think I’m too big to get sucked out, but I probably would have got my head banged around a little bit.

Then it started getting dangerous. And of course we were trying to listen to our scanner radio. We were trying to listen to other radios, and the TV stations, and now it was dark. As long as you can see what’s going on, you feel reasonably comfortable. But it was dark and you didn’t know exactly what was going on. There was a period there when the wind really got up and the water really started rising, that from about, as I recall, maybe nine-thirty, ten o’clock till about midnight that I seriously thought we might die.

Now in looking back on it, that was perhaps childish. I mean I’ve been in Vietnam. I’ve been in serious situations before but this was pretty scary. The hospital was sort of quivering. Windows were blowing out. At that time, now, we were running around the hospital. The power’s out and we had some people on ventilators, and there were no ventilators because there was no power because the emergency power failed. We were in ICU hand-bagging patients for ventilation, and the windows blew out in ICU, and in the NICU upstairs and that was a mess.

And so we’re sort of constantly shifting patients to where the rain is not pouring in, where the windows are not blowing out, whatever it takes to keep things going. It never was a panic, never a panic of any kind, but it got there for about two or three hours where it was really hectic. I think more than one of us thought about how we are going to survive this thing.

I can remember the cross walk, that goes between the hospital over Sabin Street to what's now Hollings Oncology, I guess. I walked down there. The street was covered with water and not only that, there were white caps on the water. I walked Dr. Edwards down there. I said, "Come here. You've got to see this." Because he lives right down the street from me in Mount Pleasant and so he got to come see that and marvel at the fact that not only was the water probably knee-deep at that point, but there literally were white caps on it cause the wind was blowing that hard.

By the way, I apologize for rambling.

Brooke Fox: Oh no, it's okay.

Fred Crawford: This is just kind of, my memory's kind of got a lot of things going on all at the same time.

So now it's the middle of the night. We have no power. We have more or less survived because the hurricane is now gone. The wind is blowing from the other direction but not as strong and it's obviously winding down.

I remember about, oh I don't know, four o'clock lying down on the floor of my office - or not my office but the inner office - not the one with all the windows - and sleeping for about two hours. Because everything had been taken care of, as well as it could be. There were no trauma patients so it wasn't like we had to - like I was going to spend my time operating, like I thought I was. And if I had, we couldn't have because we couldn't operate anyway, because no power, no lights, no nothing else.

And then the sun came up. The first thing I did was get up and run around all my units to make sure things were still functioning, and everybody was still alive. The next thing I did was to go up on top of the hospital -- you can access top of the hospital from a stair way on the tenth floor -- and stand on the roof, and look back toward Lockwood Drive and all the boats in the city marina were on top of Lockwood Drive. They'd all been washed ashore. You could look around, you could see trees down everywhere. There was no noise because there were no cars moving. And no power.

At that point -- my memory really does get fuzzy -- I remember working that day until about noon when it was obvious we were not going to be overwhelmed with trauma. It was obvious that the ICU's and the patients were satisfactorily covered by the nursing staff and people here. So at that point, I told Dr. Edwards and Stuart, and, I can't remember now who was Chief of Police's name was, that I was going home to check on my house.

As well as I recall, phones weren't working. At that point mobile phones were available, but it wasn't like they were everywhere like they are now. So they gave me a radio, a university radio, so I could be in contact. I went home and got to within about three blocks of my house. I couldn't get any closer because of the trees and the power lines and what have you. So I walked the rest of the way, and took one look and said this could take awhile here.

Then for the next several days, I kind of alternated between going to the hospital checking on things, coming back home, cleaning up the mess, and that's what we did for the next few weeks.

As I recall, this maybe wrong, but by middle of the morning, we had power at the hospital. I think the Air Force helicopter brought by a couple

of big generators, but that may be a figment of my imagination, but anyway we had power.

So the ventilators were back on, the units were working, but the air conditioning - the power was to the emergency outlets, so that won't run the air conditioning, a thing like that. So the OR's had all been contaminated by outside air, so we couldn't operate in them.

The next few weeks we spent cleaning up or restoring power. There was only a very modest number of injuries and those did not occur until people got up the next day, saw the tree on their house, got up on the tree or the house with a chainsaw and then fell off the house. That was the kind of trouble we saw, it wasn't like houses caving in during the storm, or anything like that.

Interestingly enough, a house that is three doors down the street from me, totally disappeared. I mean, gone. I don't mean it was collapsed. It was gone. There was nothing left of it whatsoever. The house next to me totally collapsed. My architect was right, they did a good job building my house. We had a lot of damage but the house was still there. We did not have power at our house for three weeks. There was some sort of program for - at that time - for solar power. I had solar panels on my roof that would heat my water. I was the only guy in the neighborhood that had hot water for showers, which everybody came and took advantage of. Funny how you remember things like that.

Of course all the food in the refrigerator and freezer was gone, there was little food available, no gas available, and there was not much water available. Trying to get anything done, you did it yourself, and that was to clean out things the best you could and wait for the insurance adjustor to come.

Let me stop for a second and catch my breath. You asked me questions, I didn't know whether that's useful, but that's my memory.

Brooke Fox: Oh no, it's very useful.

What were the patients - at that time - how were they reacting to everything that was happening?

Fred Crawford: I think the patients, and this a little bit speculation rather than facts, the patients that we had left were so sick that they couldn't be moved. Some of them were unconscious and on the ventilator, so of course they didn't react. Others, we had them in a sheltered part of the hospital, and so they weren't, I don't think, really aware of how significant the storm was.

But again my memory is that there was this really sort of calmness throughout the hospital. I mean bad things were happening. Now I was not the only person that had questions about survival, and yet everybody kept their cool, kept doing the right things, and patients did too.

I don't remember if there were any patient families here. We tried, since we didn't know what was going to happen, we tried to really get everybody out except essential personnel. It was mostly just the docs and nurses, and some administrators.

Brooke Fox: I'll be talking to a few people who were in facilities and maintenance next week, but I interviewed a gentleman this morning, his name is David McDaniel, and he's in the Children's Hospital Pharmacy, and he mentioned a story [about you], because I told him I was interviewing you.

He mentioned he came into -- it might have been the NICU -- he came in and you had thrown yourself against a window, or the plywood, and the maintenance guys were all... [laughs] -- do you recall that?

Fred Crawford: I vaguely remember that because the wind was shifting, and so you'd put up plywood here, and the wind would come from that way, and then you'd have to put up plywood there. I remember being in the NICU and I remember windows being blown out, and it was really scary. Because again we didn't have any power. We were ventilating these little babies by hand and the windows were blowing out, so yes, I can remember trying to do my part. I guess that's about as good as I can say, I was just trying to help like everybody else was.

Brooke Fox: So following the storm, besides your office caving in, what other damage did you have in your department, or in the hospital?

Fred Crawford: We had a fair amount of water damage from water blowing in around the windows. Some soaked carpet that had to be pulled out. Some sheet rock kind of melted, you know, from water and made puddles of sheet rock on the floor. And we lost some records both from water and from wind because of windows being blown open.

I don't recall getting any, you know, damage like the furniture or things like that. Computers were not on everybody's desk at that point like they are now. I don't think we lost many computers to malfunction. It was just that we were unable to work because we didn't have the tools to work with, we didn't have anything but emergency power.

Then there were all these patients who had appointments and you had to try to get in touch with them and say "don't come," or you know, "Come next week." That's how we spent the first few days as I recall.

Everybody had two problems at least. They had the problems at their job, and they problems at home, because everybody was affected. Nobody in town was unaffected by the storm. Everybody's trying to balance this thing of taking care of their family at home, trying to get tarps on the house, and that sort of stuff. And then coming in to the hospital and trying to do their job there for the patients. I guess everybody was kind of heroes, because everybody did both. I don't remember – I guess you forget things you don't want to remember. I don't remember any slackers or people saying "Gee I'm just not available so don't call me."

A few days later, a day or two later, the second shift came in and took over. But of course they had the same problem because even though they'd been out of town, and they'd had nice showers and everything for a few days, when they came back, they had the same problem the rest of us had, as far as taking care of the houses and rebuilding, and all that sort of stuff.

Brooke Fox: You had mentioned earlier that the Operating Room had been contaminated because of the air flow. When did the Operating Room get back up and running?

Fred Crawford: I can't remember. Karen Weaver, I don't know if you interviewed Karen or not, but she's the nurse who's run the OR's here forever and ever. She was right there and involved, and she can fill you in more on details on the operating room. My guess, I don't know -- I know they didn't get back up the next week. I know we were down for at least a week.

In some ways it was a relief because we had all that we could do without worrying about doing the OR's. In the hospital, we didn't have general air conditioning, so you couldn't have operated anyway, because the airflow

was contaminated, and once you got air conditioning, you got to go through a decontamination process of cleaning the rooms, cleaning the filters and all that sort of thing. So it was at least a week, and it could have been two weeks. I don't really remember.

Brooke Fox: Can you describe when the storm ends and you go outside. You said you went upstairs to the roof, but when you came down to go home, what did you see immediately on campus?

Fred Crawford: Trash. You know, all kinds of trash. What had floated in, what had blown in. I don't remember specifically, but limbs everywhere. Power lines down. You'd go down the street there'd be lines down. So you got to turn around and go down another street. And of course by then all the water had gone, because, one thing about the hurricane, once it's gone, it's gone. It just leaves its residue.

I can remember, taking probably an hour to get home because of trying to take alternate routes and getting over and trying to dodge trees and power lines, and things like this. There were people – everybody's out in their yards picking up trash, on the roof, trying to do something about the roof being torn off, and that sort of thing.

Then you get to hear in the background this dull roar, and the dull roar was generators. Everybody had little generators. You know, it was like thousands of chainsaws running at one time and there was chainsaws running as well. The gas tanks on these things only held a couple of gallons so it's only like five or six hours worth, because I can remember going to bed at home, and I had a two thousand watt generator that I had for another purpose. I wasn't smart enough to have it for a hurricane. It would power a little tiny - one of these little mini refrigerators, a fan, and a couple of lights, and that's all you had. And you'd load the generator

with gas and everything, and you had a fan so you could sleep good, it was really hot. About two or three o'clock in the morning, you'd hear the generator start to fade out because they'd run out of gas. And then it would be all quiet. You don't want to be getting up at that time and fill it up with gas, and you just start all over again. And then pretty quickly you ran out of gas, because you didn't have any gas. Because the gas pumps ran on electricity as well, and they didn't have any electricity.

But what I did -- and we're getting away from the hospital -- but I had about a twenty foot boat on my dock. I'd gotten it off the dock, put it on a trailer behind the house. But I had the gas tank filled up and it held about forty gallons. So I siphoned gas out of my boat to run my generator. So that worked pretty well.

Brooke Fox: You had also mentioned earlier that nobody was killed and there weren't any life-threatening emergencies that happened during the storm. People had to get to the hospital later when they were -- using chainsaws and stuff. Were there significant numbers of people for a few days who came in with injuries [from chainsaws, etc]?

Fred Crawford: For a few days, there were some. I distinctly remember a couple of chainsaw injuries. I remember a number of broken bones from falling off roofs, or from falling, trying to get in trees, and that sort of thing.

There were, as I recall, maybe -- it's a wild guess, eight or ten directly storm-related deaths on the night of the storm. I remember there was a boat that sort of disappeared. A couple had taken it up the Wando, and it disappeared. And up toward McClellenville and Awendaw some people I think died directly-related to the storm but there weren't very many.

Then the kind of injuries that we saw, many of them couldn't be treated at the hospital unless it's say a broken arm, and we put it in a cast. I mean you don't have to operate on it, those kinds of things.

And the interesting thing is, I guess everybody's too busy to fight and shoot and stab each other, and have wrecks because that business disappeared. So we didn't have the usual stuff we see in the ER every night. Everybody's too busy trying to clean up. But it came back, you know, later on.

Another thing that was kind of interesting, again not related to the hospital, but all the stop lights were down, I don't mean out, I mean down. They were gone, they were blown away. They weren't hanging over the streets. They were gone. Totally, unlike today, you pull up to the intersection, the other guy on the other side would stop and you'd wave at each other, "Come on through." Today no one would think about doing that. Everybody's very kind to each other, and it was -- gradually it went back to the same old business as usual.

Brooke Fox: What was your overall impression of MUSC's response to the storm? The preparations and the clean up?

Fred Crawford: My frame of reference is limited because I'd never been in anything like this but one time, so I don't have a way to compare it to another institution or whatever. But I think we did a good job. I think we made rational preparations; we didn't panic, we didn't shut down when we didn't have to shut down but when it became apparent that we probably ought to do that, we did. I think for the most part, I'm sure there might have been a few slackers but for the most part everybody pulled their own weight - and more - to keep things going.

I don't think any of us – but maybe Charlene Stewart and Marion Woodbury – but anybody realized how close to a financial disaster we were. If that storm had come ashore ten miles south of where it did, it would have hit us head on instead of Awendaw. We might have been out of business for six months and we couldn't have stood it. I mean, because if I can't operate, I have no cash flow and I can't pay the bills. It's as simple as that. So either I had to accept that I can't pay the bills or I got to go somewhere else to find another job. And I'm speaking of me generically now. Likewise, if I can't operate, the hospital doesn't have any cash flow. Again, generically speaking and so, it could've spun downhill really fast.

As I recall, Marion Woodberry was vice president for finance, and Marion, I'm sure, arranged for lines of credit, loans that kept us going until we could sort of get back into the cash-flow business. I think people did a really good job on the night of the storm. Everybody really worked hard but still didn't panic and then we could have sat around and wrung our hands and whined about you know, "why'd this have to happen to us?" - but it happened, and so we just sort of dealt with it. I think people did a good job doing that and at the same time, trying to keep their families together, getting the kids back in school somehow and all the stuff that has to go on, you know, in that other part of your life.

Brooke Fox: Okay, do you have any final thoughts or stories that you...?

Fred Crawford: Let me see that [list of questions].

Brooke Fox: I think you've pretty much answered every question I had. Did you happen to see Saint Luke's when you came out of the hospital the next day?

Fred Crawford: Actually when I came out that day, I did not. It was only after I returned that I saw it and... - because it was on the other side of the campus and so I didn't see that. I wasn't aware of the damage there but I saw plenty of other ones. If I had to do it again would I stay on the campus? Yeah, absolutely. We actually had for the next four-five years, two or three other significant storms that brushed us, that could have come ashore, None of them were as bad as Hugo but they could have hit us and hurt us and so we did. But by then, we'd learned how to deal with this. We were dealing - I'm sure we had a plan but it had never been implemented - so we didn't know what was good about it, what was bad; but after a storm like this, you learn what's good, what's bad, what to change. And that's one thing we did. I remember having a lot of meetings after the storm, not only to figure out how to keep going, but to say "Ok, what did we learn? How do we use this in preparation for the next storm?"

And so we had a number of other alerts if you will, and I remember staying in the hospital for all of them. I don't think for any serious one I've ever left the hospital. A number of reasons; one is it's where I'm supposed to be, and it's about the safest place in town. Fortunately or unfortunately, a lot of other people figured that out and then they started coming to the hospital when we have storm alert.

Brooke Fox: When was your office back to a state where you could actually use it again? How long did that take?

Fred Crawford: I don't remember. We had a couple broken windows. Once you fixed the windows so you don't have leakage and once you started cleaning up the mess, it may not be like it always been but you go back to work and so I would imagine, probably at the end of the week, we were pretty much back to business in the office.

Brooke Fox: Did you end up having mold problems or anything?

Fred Crawford: Oh yeah, mold all over the hospital. And we had mold in the operating room as I recall. I don't know what we did specifically about that but yeah, there was mold and the whole hospital had that sort of rank, wet, humid feel to it you know, for a couple of weeks. You really couldn't do anything till you got air conditioning back on. I mean, to a sort of a functional basis.

Brooke Fox: I think that's it on my end. Do you have any other things you'd like to share?

Fred Crawford: No I'm glad to have the opportunity to do this. I wish, like a lot of things, I wish I had sort of gathered my thoughts together, you know, shortly afterwards and then put it down which I didn't; and I apologize for being rambling and for being not able to totally recall everything but I think this is a good project.

Brooke Fox: Oh thank you, I appreciate it.

End of recording.