# **Trip Report**

# Trip to Haiti Jan. 26 through Feb. 10, 2018

#### Disclaimer

Each book of the Old Testament was written without punctuation marks. When I am tired, which is often the case when I am in Haiti or recovering from Haiti, I forget about punctuation. From time to time I add the word "and" to make the "sentence of the day" hold together. Judy tries to make these documents readable.

#### **Notes**

I had a trip scheduled for early January but had to cancel due to the flu and strep throat. This threw me behind schedule.

A couple days before the trip my Pro Surface Computer would not recognize my face. It would not recognize my pass code. I did not have time for Microsoft to fix it, so I went to Craig Cannon and his nephew. They figured out how to fix it and get it to recognize my face and reinstalled my pass code. They found that my Microsoft password had also been changed. This threw me further behind schedule.

Then as I prepared to head to Haiti, the computer would periodically lock up. I took my 10-year-old laptop which weighs much more than the Surface Pro. It performed admirably during the trip. Since getting back on Saturday night, the Surface Pro continues to lock up.

On the Wednesday evening before the trip, I broke two teeth. They were artificial teeth and there was no pain, but I tended to whistle as I talked. This would not be good for speaking to groups.

On Thursday morning I was in Dr. Bishop's office (she is always interested in my work in Haiti). By 4:00 pm, she had performed a temporary fix. With instructions on how to care for the retainer, and a prescription for an antibiotic in the event an infection developed, I was sent on my way with a substantial discount on what she would normally charge. The retainer worked so well that except for Helen and Chaudry, no one realized I had a "problem." They realized because I told them, since I figured someone on the team should know. Now that I am home again, I have an appointment for a permanent fix.

### Friday, January 26, 2018

Judy dropped me off at the airport a few minutes before 8:00 am. Since my ticket showed Ft. Lauderdale, rather than Port-au-Prince, I was able to check my bags at curbside. By having two tickets, one round trip SA to FLL and one FLL to PAP, I saved \$2,000 on the ticket price. With curbside service, I did not have to tie my bags together and drag them inside.

Eventually I arrived in Fort Lauderdale, collected bags, and called the shuttle. The shuttle arrived in about 20 minutes.

While I was going to teach, Helen was leading a medical team.

### Saturday, January 27, 2018

We caught the 3:50 am shuttle to the airport.

I made it through security without a delay while the others, the medial team, were delayed.

We made it to Port-au-Prince and processed through immigration and customs. We did not have to open any bags. Lophane and crew met us outside customs, and we loaded up and headed out.

I autographed copies of *Quality Concrete* for Lophane, Vanessa Darbouze (architect), Caudry (pastor with an engineering degree who serves as my translator when I'm teaching), and Rony (my babysitter and assistant).

### Sunday, January 28, 2018

Benjamin (driver), Valentin (security), Rony, Chaudry, and I loaded up and headed to Les Cayes. While we had talked about staying for church, Benjamin and Valentin needed to get back to Port-au-Prince before dark. Helen and Lophane stayed with the medical team for the week.

It took us about 4.5 hours to get to Les Cayes. Neither Rev. Dr. Touloute nor Dr. Bury was available, but arrangements had been made to get us through the main gate and installed in our rooms.

During the day I had been emailing with Cameron Parker. He is with Project Hope and is building an orphanage with domes in Les Cayes. I was first introduced to Cameron through Monolithic. He was working with Andrew South with South Industries. Andrew is David South's nephew.

The design he uses is from South Industries. They are a more heavily built and thus much more expensive dome than we are building. They are using steel rather than basalt for reinforcement. We arranged to meet for supper.

Cameron picked us up at 4:00 pm, and we had a wide-ranging conversation. We got back to the University about 8:00 pm. People were celebrating Karnaval early; as a result the road back to the University was packed with people dancing in the streets.

Cameron wants to get 25-or-so non-profits together who are building in Haiti and have me teach. This will probably happen in 3 to 6 months. Helen said to keep her apprised of the details, so she can coordinate where and when I wander. Based on my conversations with Cameron, it is evident that those groups could use our help.

We decided to take the class to Project Hope on Wednesday morning using the University's bus.

### Monday, January 29, 2018

We went down and set up the classroom.

Rev. Dr. Touloute, Provost of the University, introduced me, and I had to roll up my pant legs even though he was speaking in Creole. Then Dr. Bury added more.

After that introduction, what could I say? I said I learned by making mistakes and told about hollering at a crew in Jubilee and offending them. They understood both my hollering because of an unsafe condition and the crew being offended. I finally told



them about lying down in the street, so a car could run over me since they would not accept my apology. At that point I laid down on the floor. I was assured that they would listen, so I did not have to lie down in the classroom.

It is easy to tell who understands the most English. While all of them have had at least one English class, one class does not make one fluent in the language. When I would say something funny, about half of the students would grin. When Chaudry translated it, the rest of them would grin.

Chaudry translated for me in December and did an excellent job. He has a degree in engineering so understands more of what we are talking about than some of the other translators I have had.

I had Dr. Bury take charge of the print books I had brought, so he could decide who should get a book. He decided that they should go in the University library, so all could check them out and use them. He did give two books to two students who were attending from another University. Periodically a student would come to me and ask for a book. With Dr. Bury making the decisions on the books, I did not have to play favorites or avoid playing favorites.

Also, I had a jump stick loaded with digital copies of several books and

copies of the presentations I would be making. Chaudry ensured that all who wanted copies got them and ensured that we kept the jump stick.

The class lasted until 12:45 and then we took 45-minute break and continued until about 4:00 pm.

We had planned on stopping at 3:00, but there were lots of questions. We only covered half of what I had planned to cover.

Later I found out that some did not have any lunch, so it was a long day for them. We decided that we would start at 8:00 am and go until noon. Then the students could leave to find lunch.

Rev. Dr. Touloute, Provost of the University, asked me if I would allow my name to be placed in nomination for the Board of Directors of the American University of the Caribbean. I turned down the honor because I am already overloaded, and as a result would not be able to do a good job.

#### Presentations made on Monday

Disaster-Resistant Construction – Introduction	Verbal
Disaster-Resistant Construction – Failures – Part 1	PP
Disaster-Resistant Construction – Failures – Part 2	PP
Disaster-Resistant Construction – Challenges	PP

### Tuesday, January 30, 2018

We were set up to teach, with 7 students at 8:00 am. Dr. Bury suggested we wait about 10 minutes before starting. By the time we started we had 30 students and within a few more minutes we had 40. As I taught, more students came in.

One of the students asked if he could translate. I agreed, and he did a good job for most of it, but several times he did not understand the concepts we were discussing, so he and Chaudry would have a conversation. His friends wanted to know what was wrong that he could not translate.

Today there were more questions and more people asking questions. As a result, we got off the topics I had on my list but answered the questions which they needed to have answered.

Just before breaking for the day, I showed the introduction to dome building presentation, and there were so many questions that we kept the class 30 minutes beyond when we planned on ending. We covered only about half of what we planned on covering for the day.

All the students who have computers and smart phones have downloaded books and presentations, so they can study on their own at a later date, and they can start teaching others. Based on the questions, many of students had been reading the downloaded books.

#### Presentations made on Tuesday

Student's Questions Verbal

Disaster-Resistant Construction – Developing programs to serve the needs

of the community rather than the dreams of the charity Verbal

Disaster-Resistant Construction – Aggregates + PP
Disaster-Resistant Construction – Concrete Physics + PP
Disaster-Resistant Construction – Introduction to Domes PP

### Wednesday, January 31, 2018

We headed down to catch the bus at 8:00 am to take a field trip to Project Hope. Apparently, the key for the bus was locked in an office, and it took a while to obtain the key to that office. While that was going on, I took the students into a partially completed building on campus. After pointing out a few things which were being done right, we started looking for things which could have been done better.

Most of the columns for doors had not been poured, but the beam overhead had been poured, so it would be difficult to tie the column to the beam, and it would be very difficult to consolidate the concrete in the column.

Where columns for doors and windows had been poured, they were not vertical and stopped below the beam they



were to tie to if the structure were to be disaster-resistant. The photo at right



shows that the rebar truss which was to be tied through the support beam was bent over and not attached to the beam when the beam was poured.

The photo on the left shows the unconsolidated concrete in a major support beam. In addition to being unconsolidated, the concrete contains an oversized stone and a chunk of 2 by 4 wood. Rebar on one stairway was exposed, and I was able to break pieces of concrete, indicating that the concrete was weak.

Concrete in many of the beams holding up the concrete roof was very poorly consolidated. Rebar was poorly placed, and much of it was exposed.

I noted that the ground level beam/edge of the slab at the front of the building had a problem, so I asked the smallest lady in the class to take a stick and dig out some of the concrete. She was soon digging in clay. Apparently, someone forgot to dig out a portion of the area, so the concrete was only about ¼ inch thick.

Some of the walls to receive columns were partially saw-toothed so an excellent bond could not be developed. Some were saw-toothed in an appropriate manner; but when concrete had been poured into them, it was not consolidated, so there were major gaps in the column in the saw-toothed areas. At one point I asked if a small child could crawl through one of these gaps. Some thought one could; others said the child would have to be very small.

Rony shot over 100 photos.

By this time, it was 8:30 and the bus was available, so we boarded and headed out. All seats of the bus were full, and we had about 8 people standing in the aisles. Chaudry counted 56 on the bus.

Having an excellent translator has resulted in much more excitement within the class than the class we had last year.

Shortly there was some excitement. After a few minutes of people jumping around and some of the ladies squealing, a tree frog about 2.5 inches long landed on my shirt. I caught him and handed him to Chaudry.

We missed the turn-off to Project Hope and had to double back to find it. When we got there, we got a tour of two domes they were building. Unlike the EcoShells we are building, these domes are built with a side-wall about 6 feet tall and about a foot thick. Then the dome is inflated to provide a dome-shaped roof. Internal walls are plastered concrete block. These are substantial buildings and are not cheap to build.

The first dome had the side walls, and they were getting ready to attach the Airform. The second dome had the roof in place and some of the internal walls in place and finished. Every place I looked, I saw quality. Other buildings on the site built with other technologies also showed quality construction.

During the tour one of the ladies appeared sick, so I had Chaudry take her to the shade to sit down and got one of the other ladies to go over to help her. Before long the other lady was getting her some water. By the time the tour was over, the lady was feeling better.

One of the engineering instructors wanted me to give him a formula for concrete which would work with any aggregate he had. For 15 minutes he insisted that I needed to give him such a formula, and he would not listen when I told him that formulae were based on the porosity of the aggregate blend. If he could not

control that, it was not possible to have a formula that would always work.

By the time we were ready to leave, it was after 10:30 am. We had planned on getting back to the campus by 10:00 am. The students were excited about what they were seeing, and as a result, they asked numerous questions. We got back to the campus, and I headed to the classroom. Rony and Chaudry went to my room and picked up the projector, computer, and other teaching supplies.

At 12:30 I asked if they wanted to stop for the day, since we had planned on stopping at 12:00. A majority of the class wanted to, but some stayed and asked questions for another 20 minutes.

Another instructor came in and borrowed our projection screen (this is one that the University owns). He said he would have it back in time for our Thursday morning class.

We had lunch with Dr. Bury. He was headed to Port-au-Prince that evening and would not be on campus the nex day. We talked about certificates and the final exam. I'm considering taking the students back to the building-in-progress for the final exam, to let them identify problems and explain what should be done to prevent the problems.

Currently we are 1.5 hours behind schedule, but with all the questions we have had, we are moving right along.

#### Presentations made on Wednesday

Tour of building being built on campus	Verbal
Tour of Project Hope	Verbal
Disaster-Resistant Construction – Admixtures +	PP
Disaster-Resistant Construction – Mixing Concrete +	PP
Disaster-Resistant Construction – Design Considerations +	PP

### Thursday, February 1, 2018

When we arrived at the classroom and found that the screen had not been returned, we went to the room and got the foldable screen, and Rony and Chaudry hung it. During the rest of our stay, the screen that was going to be returned never did come back.

The lady who was sick on the field trip to Project Hope was feeling fine.

As we went through the presentations, there was a lot of discussion, sometimes concerning items we had observed the previous days.

The final was scheduled for just before noon on Friday.

Nick Troutt joined us for lunch and suggested a field trip to a new aggregate plant and a new block plant. I said that I was so tired that I could not think about it until I had slept for a couple of hours.

Larry from Chicago also joined us for lunch. He is with a mission team with

10 members and was teaching math at the University that week.

After lunch I laid down. At 3:00 pm, Nick figured I had a couple of hours of sleep and was there ready to go on the field trip. He had a vehicle arranged to take us.

It probably took us 15 minutes to get to the plant. The aggregate plant consists of an impact crusher which can handle rock at least 8 inches in diameter, and then there is a screening and washing system that is fed the crushed rock. Conveyors stack the nominally 0.5-inch to 2-inch gravel and the pea gravel

The sand drops into a washer and is augured out and stacked. The dirty water goes to a settling pond.

With these products, I could make quality concrete without having a copy of *Quality Concrete from Crap*.

The block plant is state-of-the-art and is rated at 1,000 block per hour. That is three block every 10 seconds. They have made block with the pea gravel they have produced, and the block are excellent. Currently the production is being used to build a perimeter fence. Local masons have been trained to lay conventional reinforced concrete block walls.

They had some "good" block from Port-au-Prince that were made with soft limestone aggregate. They stood out like sore thumbs.

They still must build the curing chamber for the block plant.

Besides conventional block, they produce bond beam block and concrete lintels which become the forms for pouring bond beams over doors and windows.

We got back to the University about 4:30 pm.

When I filled my water bottle before going to bed, I used the last of the water in the 5-gallon jug in the kitchen. The other jugs were empty, so I needed to ration my water until more was brought in.

With adding a Conventional Concrete Masonry Unit Wall system presentation for tomorrow, we were now running only an hour behind schedule.

#### Presentations made on Thursday

Disaster-Resistant Construction – Types of Structures	PP
Disaster-Resistant Construction – Layout	PP
Disaster-Resistant Construction – Foundations	PP
Disaster-Resistant Construction – Slabs	PP
Disaster-Resistant Construction – Walls – Confined Mason	ry PP
Disaster-Resistant Construction – Domes – Site Selection	PP
Disaster-Resistant Construction – Domes – Slabs	PP
Disaster-Resistant Construction – Domes – Airforms	PP
Disaster-Resistant Construction – Domes – Stuccoing	PP

### Friday, February 2, 2018

There was no drinking water, so I conserved my bottle of water and hoped that the jug in the classroom had water. That water jug was empty also.

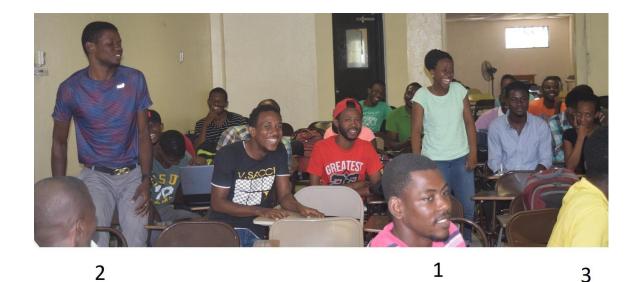
With the final exam I had a couple of non-credit questions which were designed to get the students to relax. One was about a boy who did not know what to do with birthday cake. I talked to one young lady and asked if she would handle that question and get someone else to also answer to make the class laugh and relax. I suggested that one of them say that since he did not know what it was, it should be taken from him so someone who knew what it was could eat it. She said she would take care of it.

As the morning progressed there were lots of questions, and I had to move fast through some of the presentations to get finished before the final exam, but we made it.

We did not get drinking water until about 10:00 am. When I suggested a break, the level in the jug in the classroom declined fast. Everyone was thirsty.

The final exam consisted of many photos. There were questions associated with them, such as "What is this?" "How would you correct this?" & etc. A student would be selected, stand up, and the slide would be projected. If he could not answer the question, he could select someone to address it. After it was answered, the class got to comment. All this was done in Creole. The students all felt comfortable pointing out each other's incomplete answers. Often, I could tell what was being said by the gestures which were being made. Rony and Chaudry judged the answers. That way we did not have to slow down for the translation.

When we started, I walked back and selected the young lady (1) (see photo on next page) who was going to handle the non-credit sample question. She already knew what was coming and was already laughing. I then advanced the projector to show the slide of the boy who did not know what to do with birthday cake. She was giggling in anticipation of her response and what would follow. She answered and then asked one of the young men (2) for his comments. He stood up and said he could not answer and sat down. She called on the lady (3) who had gotten sick on Wednesday's tour of Project Hope. I lost track of what was being said, but the whole class was laughing.



I thanked each of them and shook their hands. Then I turned the management of the test over to Chaudry and Rony. We had a minute for each to answer if we stayed on time. We did not. Several times the electricity went off. My computer had plenty of battery power, so the student to answer would come up and look at my computer, describe what the slide was, and then answer.

The second non-credit question was a photo of an orphan wearing my hat. As it happened, the same young lady got that question. She had them laughing with her answer and then asked, "Can I have a real question?" I said, "Yes." She then seriously answered the question she got. The students had figured out that the first non-credit question was a set-up. They figured that the second one was

also. It was not; it just happened.



After all the students had answered questions successfully and some had been ribbed by their classmates, we paged through the rest of the slides and the students all called out answers.

Rony got all of us huddled into a mass and took our photo. One of the students also worked in the engineering department. He had entered all the names on a spreadsheet on his computer, and at some point, delivered it to Administrative Office, so Certificates could be printed.

As we packed up, most of the students thanked me for teaching the class.

Earlier in the week, Pastor Touloute had said that there would be a reception, but that did not take place.

We headed back to our rooms with the equipment (someone had run off with the projector stand). Apparently, they thought it belonged to the University. I was wondering whether I wanted to eat or sleep and had just about decided to sleep.

As we got close to the room, Nick Troutt came out and said that I needed to go into the dining room. He introduced me to the chairman of the Board of Directors of the University. I joined the chairman for lunch.

After lunch we toured the campus for an analysis of the problems that I could identify.

When I got back to the room, Chaudry had retrieved the projector stand. Later the certificates were delivered to me, and I signed them.

Rev. Dr. Paul Touloute, the Chairman, an engineering instructor from the University who had joined my class from Tuesday through Friday, and the University's secretary came past. The engineer was in Port-au-Prince when he heard about the class, canceled his plans, and came to Les Cayes to attend the class.

They came because they had a plaque to show me. They had been going to give it to me, but they discovered a misspelling. When that was corrected, they would get it to me. (Dr. Bury met us at the airport on Feb. 10 and delivered it.) We talked about many things, mainly about how to improve Haiti and the university. Since the misspelling would not show in a photo, a photo was taken of the presentation.



#### Presentations made on Friday

Disaster-Resistant Construction – Confined Masonry – Roofs	PP
Disaster-Resistant Construction – Domes – Finishing	PP
Disaster-Resistant Construction – SCIP	PP
Disaster-Resistant Construction – Conventional Block Masonry	PP
Disaster-Resistant Construction – ICF	PP
Disaster-Resistant Construction – Building a Church	PP
Disaster-Resistant Construction – Final Exam	Verbal

## Saturday, February 3, 2018

We went out and took a couple of photos of cracks in the building. It was something we had talked about the previous night.

Rony had taken photos with his cell phone of the Chairman and Dr. Touloute giving me a plaque. I asked Rony to send one of the photos to Judy.

At about 1:00 pm, Lophane and Helen arrived in one vehicle, and Benjamin and Noel arrived in another vehicle. Lophane said where he had been earlier, but I did not catch the name of the town. He had to drive 2 hours more than Benjamin to arrive.

Dr. Touloute, Helen, Lophane, and two pastors had an hour long meeting concerning raising chickens, and then we headed out about 2:00 pm. While there is a direct road from Les Cayes to Jacmel, it takes over twice as long to travel it as to (1) head back towards Port-au-Prince, (2) across the mountains, (3) take the cut-off to Jacmel, and (4) cross the mountains again. The main road from the northern coast to Jacmel has many more curves and is narrower than the road to Les Cayes. It was an adventure. According to Google Maps, it takes 4 hours if there is no traffic. It took us 6 hours.

We were checked in and headed down to eat by about 9:30 pm.

## Sunday, February 4, 2018

At Jacmel we had warm water for showering.

We made it the church about 9:00 am. Helen stayed at the hotel.

The service lasted until about 10 am. Towards the end Lophane and I were invited up to the front. We introduced ourselves and explained what we were doing. Chaudry, Rony, Noel, and Benjamin just had to stand up where they had been sitting.

After church, Lophane and I discussed the class. It will be at the church's Guest House and will start at 9:00 am and run to noon. Everyone will have lunch, provided by Mission:Haiti, and then it will restart at 1:00 pm and go until 3:00 pm or thereabouts, but not beyond 4:00 pm.

In Les Cayes we did not have lunch for the students, so we ended up having

classes from 8:00 am until noon. That was 4 hours per day for 5 days. This will give us 5 to 6 hours per day for 4 days, so we will have from 20 to 24 hours of instruction. Lophane assured me that I could quit early anytime I was tired.

At 1:00 pm Helen and I went to lunch. At that point I learned that the others had gone to visit some of Lophane's relatives in Jacmel.

The Rev. Mayor Marky Kessa and his group joined us for supper.

### Monday, February 5, 2018

Helen announced that a friend of hers had died and that she needed to head back to Florida for the funeral. She assured me that I would be OK and that the only thing additional that I needed to do was to pay for the food that was being eaten. Lophane and Noel would take her back to Port-au-Prince on Tuesday, she would catch the plane on Wednesday, and Lophane and Noel would be back on Thursday to pick us up.

As we set up, more students came in. We ended up with about 25. Three of them admitted to being engineers. The rest were building contractors and building inspectors. Two were ladies.

My projector would not work. The bulb failed. I did not have another bulb, so the church found a projector for us to use. We used it. (Note: When I got home the projector worked.)



The only place to hang the screen was in front of a window. Since the screen can be used for front projection or rear projection, light coming through the window tended to wash out the picture. I commented on this as we were focusing the projector, and Benjamin, Rony, and Chaudry disappeared. Suddenly the picture became much brighter. They had taped a dark cloth over the window.

Lophane and Rev. Marky introduced me. They went on loud and long about my qualifications. Then I talked about how I ended up coming to Haiti. I was an hour into the first presentation before I had my first question.

An engineer stood up and said, "I have three questions." Then he asked his questions. Each time he raised his hand, he had 3 or 4 well-thought-out questions. After answering his first 3 questions, I shook his hand and said that asking questions like that made the class better. After that, the students were not shy about asking questions.

Sydney, Rev. Marky's wife, was to fix lunch. By

10:00 am I could smell the cooking and started getting hungry. At 12:00 pm I was ready to eat, but the food was not ready. Finally, it was ready a few minutes after 1:00 pm. Sydney is an excellent cook. We had salad, rice, Creole sauce, a meat stew, and a fruit drink.

We restarted the class at 1:30 pm.

We were to have class until at least 3:00 pm, but not go beyond 4:00 pm. I was in the middle of a presentation at 3:00 pm, but by 3:30 I was finished so we shut down. We had lots of questions during the day. Excellent class.

I got the password for the hotel internet and tried to log on with my computer. After two days I found that Google shut my account down because someone in Haiti was trying to log on to my Google account. They knew it was not me because my cell phone, which I had in Haiti, was reporting to them it was in Texas.

The mayor and Sydney joined us for supper.

#### Presentations made on Monday

Disaster-Resistant Construction – Introduction	Verbal
Disaster-Resistant Construction – What is Concrete?	PP
Disaster-Resistant Construction – Failures – Part 1	PP
Disaster-Resistant Construction – Failures – Part 2	PP
Disaster-Resistant Construction – Challenges	PP
Disaster-Resistant Construction – Needs	Verbal

### Tuesday, Febuary 6, 2018

Lophane, Noel, and Helen headed to Port-au-Prince as soon as breakfast was over, and the rest of us headed to the Guest House for class. We got set up, and most students were in place when we started. The rest were there within 5 minutes. That is better than at Les Cayes.

As before, we had lots of questions.

Lunch was at 12:30 pm.

The strap that holds my cane to my belt broke. The strap is very handy, since it allows me to let go of the cane and it does not fall to the ground. In a very serious voice I announced to the class that I had a crisis and would have to return to Texas immediately. When asked what the crisis was, I pointed out the broken strap on my cane. One student said, "We are Haitian; we can fix anything." Then he fixed the strap.

We broke off at 3:00 pm.

#### Presentations made on Tuesday

Disaster-Resistant Construction – Why Concrete Fails PP

Disaster-Resistant Construction – Aggregates	PP
Disaster-Resistant Construction – Physics, etc.	PP
Disaster-Resistant Construction – Admixtures	PP
Disaster-Resistant Construction – Mixing	PP
Disaster-Resistant Construction – Design Considerations	PP
Disaster-Resistant Construction – Types of Structures	PP (through
slide 35)	

### Wednesday, February 7, 2018

Over breakfast I pointed out a strangler fig that was attacking a tree near our table. It was the first one I had seen in Haiti. I explained that I had met them in Mexico many years ago. They are a group of vines, not just one species, that grow around tree trunks and limbs and eventually choke the host tree. Eventually the host tree dies and rots. The strangler fig remains as a hollow tree.



I pointed out to Chaudry that it could be a good sermon example for the way the devil could enter our lives with a very minor sin and then could move in small steps to a major sin. We discussed numerous possible scenarios that the strangler fig could illustrate. My favorite was it was like a clinging girlfriend. At first it would be a lot of fun having her always hanging on, but with time, she would demand more and more attention until the man had no life.

We took the time to walk out into the street and look at a couple of problems we had observed driving past.

By 9:00 am there were about 10 students. Chaudry started the class with a song and prayer like he usually did, and then he and Rony took the class out on a tour along the street pointing out different problems. This lasted until

about 9:30 am when all the students were there.

The class continued with lots of questions. About 11:00 am we took a break, and several students wanted photos with me. I was glad to comply.

About 11:30 am one of the young students said that he worked with some engineers in Port-au-Prince and that they said that a column beside the windows did not need to reach below the window and that to put a full-length column in just

added useless cost. There was considerable discussion with Chaudry for about 15 minutes with the other students watching.

Finally, I got up and asked to say a few words. I pointed out that there were engineers with different opinions. That an engineer had designed and supervised the building of a structure on the American University of the Caribbean campus until he was fired. It was going to be torn down, because it was very unsafe. I pointed out that engineers who went into buildings after an earthquake were much more conservative in their designs than engineers who only learned engineering in the classroom from engineers who had never been in a failed building.

We ate lunch about 1:00 pm and ended for the day at 3:10 pm.

We packed up; and when we were ready to leave, Chaudry told me that we needed to wait for Sydney. I had no idea what was going on, so I asked, and he said, "Didn't Lophane tell you what he arranged?" No, Lophane did not.

Lophane had arranged for Sydney to take us to homes built by Lutheran World Relief after the earthquake. Some were very nice small homes. Some were temporary structures which were still being used. We were introduced to the families and invited into the homes. Although I was exhausted, it was worthwhile.

Many of the children came up to hug me. One toddler hung onto my hand as we walked around.

We went to an



orphanage. It was well-built. The children were well-dressed and appeared to be well-fed.

### Presentations made on Wednesday

Finished - Disaster-Resistant Construction – Types of Structures	PP
Disaster-Resistant Construction – Layout	PP
Disaster-Resistant Construction – Foundations	PP
Disaster-Resistant Construction – Slabs	PP
Disaster-Resistant Construction – Confined Masonry – Walls	PP
Disaster-Resistant Construction – Confined Masonry – Roofs	PP
Disaster-Resistant Construction – Domes – Introduction	PР

Disaster-Resistant Construction – Domes – Site selection	PP
Disaster-Resistant Construction – Domes – Slabs	PP
Disaster-Resistant Construction – Domes – Airforms	PР

### Thursday, Feburary 8, 2018

Today we were to finish the presentations, have the final exam, and issue certificates. We had 5.5 hours, and my calculations indicated that it would take 5 hours if we did not have too many questions. We had enough questions so we could ask each student nearly 3 questions for the final. Chaudry and I decided that we could stop at 2 questions. The most important part was answering the students' questions.

During the morning there were numerous questions. There were so many that I wondered if we would be able to get through all the presentations. We did skip the Domes – Challenges presentation.

Pastor Marky brought the certificates past for me to sign and said he would be back to give them out. He had not signed them yet, so he also needed to sign them.

Chaudry told me that the President of Haiti had come to Jacmel and that the mayor was meeting with him. Depending on his schedule, I might have to talk a little longer, so the mayor could make it back to participate in the ceremony. At that point, I concluded that the President was more important than the class and that I would not see the mayor again that day.

While Chaudry was asked questions in Creole, I signed certificates. When he translated the questions to English, I listened and answered them. Before lunch I had all the certificates signed. The assumption was if someone did not pass the final exam that we would not give them the certificate I had signed.

By midmorning Lophane and Noel had arrived from Port-au-Prince. The student who questioned the need to build as substantially as I taught asked one of his questions. Before I could answer it, Lophane answered it. While I do not speak Haitian Creole, I could tell that Lophane did not pull any punches. Among other comments was an invitation to crawl into homes after the next earthquake.

We broke for a late lunch just after we finished all the presentations.

I explained that the President was in town and that the mayor might not be able to make it back to sign certificates. If he could not, then we would take photos of each receiving a certificate, and the certificates would be collected and saved for the mayor to sign. Then they would be distributed to the students.

The final exam was to be like the Les Cayes final exam. A person would be called on, a slide would be projected, and they would explain what was shown & how to correct it if building another building, etc.

I had set things up with Lophane and Noel for answering the first noncredit question on the final examination. The slide showed a boy who did not know what to do with a piece of birthday cake. They argued as to whether they should teach him how to eat cake or take it away from him and eat it, so it would be appreciated. The class was roaring.

We then proceeded with the examination. Rony and Chaudry graded the answers. After the person had given his answer, others in the class could comment. It became clear that some students had a greater understanding than others, but all of them grasped what we were trying to teach. Having missing parts of an answer pointed out by fellow students was motivation to learn. Anyone who messed up an answer was called again later with another question.

During the final exam, the mayor arrived, slipped into a seat beside me, and started signing certificates. His secretary was with him and added the seal of the City of Jacmel to each certificate.

I never learned how he arranged it, but I heard several stories from the students.

One was that he invited the President to come to the ceremony.

One was that the President had to get back to Port-au-Prince.

One was that the President told him that inspiring young engineers was a job that he could not shirk.

Whatever the truth may be, the mayor is known for keeping commitments that he makes. He was there to sign certificates, the city secretary was there to add the official seal of the City of Jacmel to the certificates, and the mayor was there to hand them out and to shake each student's hand.

Chaudry announced that everyone had passed the exam.

We called the kitchen staff out and thanked them for taking care of us. Then we moved outside for a photo. Sydney is in front of me, and Chaudry is in the white shirt.

For giving out the certificates, the mayor and I stood on the porch, and Chaudry called a name and handed the certificate to the mayor. The mayor handed it to the student and shook the student's hand. Then I shook the student's hand. Rony then shot a photo of the three of us.



Just about everyone who had a cell phone camera handed their camera to someone else to shoot a photo when their name was called. The process was not rushed. It was as if the mayor had all the time in the world to spend with the students.



Everything went along without a hitch until the mayor handed Mizmaye her certificate and our photo was taken. She turned and grabbed me, hugged me, and whispered, "Granpapá." What could I do but hug her back and mummer in her ear, "Merci." That is "thank you" in Haitian Creole. The hug lasted long enough for Rony to shoot several photos. With the big grin on the mayor's face, I wondered if he was in on it.

We started disassembling our gear, and suddenly the mayor was gone.

Mizmaye introduced me to a mechanical engineering student who showed me photos of a car he was building. He started out assembling the frame and

ended up with a beautiful sports car. I suspect that they are an item, but neither said that they were.

When we got back to the hotel and put things away, most of our group headed to the beach. I was tired, so I laid down. Lophane stayed to keep an eye on me. If I would have gone to the beach, he would have gone. If I would have known that he skipped the beach to keep an eye on me, I would have gone to the beach for my nap.

About 7:00 pm I woke up and went down to the supper area. Lophane was already there. He filled me in on more of the mayor's schedule that day. When the mayor makes a commitment, he does everything he possibly can do to keep it.

About 7:30 pm the beachgoers came in, and we ordered. Shortly thereafter the mayor and Sydney arrived.

The mayor and I talked about churches, and he asked about using domes for churches. We discussed that in detail, and he asked what the cost would be for building a church of different sizes using the Monolithic Dome concept. I explained that was beyond what I could do and that I would contact Monolithic and find out.

Lophane announced that we would leave at 9:00 am in the morning.

#### Presentations made on Thursday

Disaster-Resistant Construction – Domes – Stuccoing	PP
Disaster-Resistant Construction – Domes – Details – Finishing	PP
Disaster-Resistant Construction – SCIP	PP
Disaster-Resistant Construction – Conventional Masonry	PР

Disaster-Resistant Construction – ICF Disaster-Resistant Construction – Churches	PP	
	PP	
Disaster-Resistant Construction – Final Exam	Verbal	

### Friday, Feburary 9, 2018

My big suitcase contained the projector tripod, the folding screen, an extension cord & splitter, and a steamer for taking wrinkles out of the screen. It would be stored at Lophane's Guest House for the next time we needed it.

My medium-sized suitcase was packed so I could check it on American Airlines.

My small suitcase was packed with the projector and two cameras, so it could be a carry-on.

At breakfast, I limited myself to one cup of coffee. Based on what happened later, that was a good idea.

We were on our way before 9:00 am. My Google Maps said that we would arrive in Port-au-Prince by 11:46 am. I never believe what it says.

We headed up the mountain, and by 10:00 am we were high up in the mountains, and periodically when on a curve, we could still see the Caribbean Sea. Then after much ear popping and many hairpin curves, we started downhill. By the time we got to Léogâne which is on the north shore of the southern peninsula of Haiti, we were still close to the Google Maps schedule. After Léogâne, the traffic started picking up.

As a result, the traffic slowed to a crawl and then stopped. At one point a number of police vehicles passed us. I counted 27 of them after I realized there were going to be more than just a few.

Lophane and I talked about the several slabs we had in Jubilee where we had not completed the domes. Due to political conditions it is not likely that we will get back to Jubilee to finish the domes. We decided that Lophane would make arrangements with local masons to build concrete block walls and then add a metal roof to each.

Chaudry got a message from Mizmaye. She wanted to thank me for coming, for teaching, and for sharing so much information. Chaudry made an appropriate reply.

By this time, I was wishing that I had not had that one cup of coffee. We make a pit stop someplace in Port-au-Prince beside the road, and finally got to Lophane's Guest House about 2:00 pm.

After unloading, we headed out to get some take-out and then came back to eat. During that drive we dropped Chaudry off. After we got back, Rony took his food and headed home. Meanwhile, Benjamin delivered Noel and then went home.

### Saturday, Feburary 10, 2018

After breakfast we loaded up and headed out. Down the road we stopped and picked up Lophane's sister, Harriot. Then we headed to the airport. We arrived about 7:05 am, and Dr. Bury met us as we got out of the vehicle. He had the redone plaque for me. The original had a misspelling.

The airport was packed, so I greased a palm and got to the head of the line, and soon I was through security and at the gate.

We boarded the plane on time and made it to Ft. Lauderdale. Processing though Immigration and Customs was fast, since I was using global entry. Collecting baggage in between the two was very slow.

After clearing customs, I needed to go to the American Airlines ticket counter to recheck my bags and to get tickets to DFW and San Antonio. I walked to an information booth and asked where the Eastern Airlines ticket counter was. After a dead silence, I was asked if I meant American Airlines because Eastern Airlines had been gone for many years. I said I guessed I did. My directions were explicit, including riding an escalator up to a higher level. Besides two bags on a cart, I had my cane. I found and used an elevator. After finding the ticket counter, I checked the heavy bag and got tickets to Dallas-Ft. Worth and to San Antonio.

On the plane I met a couple from Tyler who had been on a cruise. We talked. She was Margie Free. She is involved in a ladies' Bible study, and she is going to mention our conversation and what I am doing in Haiti to them.

In Dallas, we deplaned and then boarded the plane to San Antonio. After sitting on the runway for 30 minutes, we took off and flew to San Antonio.

After picking up my checked bag, Judy picked me up and drove me home.

#### Other Reports

As time permits, a separate report will be developed for each of the following topics. If you would like a copy of any of them, please email me and request a copy.

The American University of the Caribbean building under construction

**Project Hope** 

New Aggregate Plant & New Block Plant

Lutheran World Relief Village