

## **James W. Hicks**

This is an interview with James W. Hicks about his activities in the West Africa Smallpox Eradication Project. The interview is being conducted at the Centers for Disease Control and Prevention in Atlanta, Georgia, on July 14, 2006. It is a part of the 40th anniversary reunion of the launching of the program. The interviewer is Victoria Harden.

**Harden:** Mr. Hicks, you were born in Jacksonville, Florida, on January 17, 1930. Would you describe for me briefly your childhood and pre-college education in north Florida, and what it was like in the 1930s?

**Hicks:** As a child, I grew up in the Depression years, and that had some differences when compared to a later period or today. We were poor, but we didn't know we were poor because everybody around us was no better off. It was a happy time in my life; however, at the age of 4, my mother died and that was a very sad time. I suppose, during that period when my mother died, the one person who was most influential in my life from that time on, and into my adult life, was my maternal grandmother. I liked my paternal grandmother very much, but I only saw her once for a 2-week visit because she lived in Vancouver, Canada, and British Columbia was a good ways from Florida in the '30s, so I really didn't know her. But my maternal grandmother was as close to a saint as you're going to find in this world.

**Harden:** What was her name?

**Hicks:** Her name was Elmira Fisher Brown, but we called her Big Dolly. That was developed out of an affectionate term: my mother had called her mother Dolly. It was just a nickname, but when my sister was born, the nickname became a name for my sister, and she was named Dolly. So now we had Little Dolly and Big Dolly. Well, I never looked on Big Dolly as any kind of a size associated with the name. It was just said in one swoop-Bigdolly. But I'm grateful for the chance to mention her name because she is the most influential person in my entire life, up until the time I got married.

**Harden:** In 1947, you were 17, and you went into the US Navy and served in the Pacific until 1952. Would you tell me about your time in the navy, and how it might have helped prepare you for your later work in the smallpox program and elsewhere?

**Hicks:** Well, I enlisted in the navy, and so as a recruit, I had to go through one of the naval training camps. My boot camp was in Bainbridge, Maryland. I came out of Bainbridge after 12 weeks and was selected to go to the Naval Air Technical Training Center in Jacksonville, Florida. It was like going back home again. It didn't seem like I was going to see the world, you know? I went back there, and I completed training in aviation fundamentals. Then I was selected to go to Control Tower Operators School. The rating was a specialty at that time and designated Specialist Y. The work was similar to that of flight controllers and control tower operators that control aircraft today.

I finished that school, and then I went on my first assignment, which was in Kodiak, Alaska. I stayed there for about a year and a half, came back, and then my next assignment was an airways flight controller at Moffett Field, California. I was there a very short time because I wanted to go abroad and see something.

I made the choice to accept an assignment to Agana, Guam, which is in the Marianas Islands in the Pacific. While on Guam, I also went at times to Saipan and Rota Islands, as part of my work, but for the most part I remained on Guam as the lead Control Tower Operator for the time I was there. When the Korean War broke out, I took a contingent of men from Guam, went to Sangley Point, Philippines, and opened up the small airport as a supply shipping point for the troops in Korea. We used metal mats, which had proven to be quite useful in World War II, for the single runway. We would later install a concrete runway to better serve the support mission..

I remained in the Philippines until it was time to return to the United States for discharge. During my last months of assignment, President Truman extended everybody involuntarily because of the war, and so I stayed there another year. When I left the Philippines, I went back to North Island, California. Again, I was in flight control there until I was discharged in January of 1952. I entered the University of Florida that spring Semester.

**Harden:** So, here you are coming back after long military service, and having definitely become an adult at this point, and then you start back to college. I expect that your approach to studying might have been different at this point from the 17- and 18-year-olds who were going to the University of Florida. You ended up with both a BA and a BS degree and were chosen for the Hall of Fame and elected to the Florida Blue Key Honor Society. You must have seen this period as an opportunity.

**Hicks:** Well, I did realize that I lacked education, and the World War IIO and Korean Bill of Rights both offered an opportunity to help correct that. I didn't even have a high school diploma. I realized this early on, when I entered training in Jacksonville and I was selected to go to flight training at Pensacola. When I was about to leave for Pensacola, I was told by the personnel office, "We were pulling together everything for your file, and we don't have your high school diploma here." And I said, "Well, I can't produce it because I don't have one. But I passed all of your entrance tests with high scores." And they said, "Well, there's a right way, a wrong way, and a Navy way, and this is the Navy way. And we're sorry, but we can't accept you."

Well, that bothered me immensely because I wanted very much to be a navy pilot. When I got into my next assignment, I took some Armed Forces Institute extension courses to get enough credits to at least get an equivalency certificate. Duvall High School, which was no longer a high school but more of an adult vocational school with correspondence courses, literally gave me a degree, but I never had a legitimate diploma.

When I applied to the University of Florida, I was accepted because of what I had, but I was on probation, right from the first day I entered classes. Well, that woke me up a little bit, too. I've got to do something, or I'm going to lose this opportunity. So I took advantage of this opportunity, made dean's list the first semester, and after that, the university took me off of probation and left me alone.

**Harden:** What did you major in?

**Hicks:** I was fascinated with the whole liberal arts concept, and so my work was 2-pronged. For the Bachelor of Arts degree; my major was English, with minor courses in history and economics. For the Bachelor of Science portion, I majored in a typical pre-med course, with biology, chemistry, and psychology, and I took physics and philosophy as electives. So courses on one diploma, I could use on the other as electives and vice versa. I had to take, I think it was, 30 semester hours over and above the requirement for one degree because I was studying for both degrees at the same time. It was simply my attempt to catch up on a broad education because I had lacked academic achievement when I went into the navy.

**Harden:** Then, when you graduated, you began to work with the Florida State Board of Health. Tell me about being a VD [venereal diseases] Representative of the Florida State Board of Health.

You were in this co-op program with the Public Health Service, and I'd like to know more about that too.

**Hicks:** The Public Health Service, and specifically CDC as a lead point, had an arrangement with some states, not all of them at that time, whereby you were an employee of the state but at the same time your paychecks came from the federal government. Someone in this program was called a Co-op. The understanding was that at some point in time, usually about 1 year, you would be tested and switched over to what then was called a Program Representative or VD Rep.

**Harden:** So when you were switched over, then you were an employee of the federal government, working for the state, or you were still an employee of the state government?

**Hicks:** I was a federal employee assigned to the state, with some supervision coming from state employees. As soon as we took the federal test administered by CDC, we were then promoted to GS-7 and became an employee of CDC. It was simply a co-op arrangement between CDC and state health departments. That relationship of being partners in public health programs has existed down through the years. There's always been that tie with state health departments and CDC. So that's what happened there.

**Harden:** What did you do as a VD Officer?

**Hicks:** First, I was assigned to a VD clinic. They spent a day or 2 teaching me how to take bloods from the arm to do serologic tests for syphilis and also how to trace contacts who had been named during interviews with patients to determine their sexual contacts. So that's basically what I did for about 3 or 4 weeks. Then I was transferred to a mobile team to take blood tests. We used a type of vacuum tube to obtain a blood sample once you got into the vein. I remember calling them Kydell or Shepherd tubes. And we would get a great big bullhorn and put 78-rpm records on a record player in the front seat of a panel truck. We would go park somewhere out under a chinaberry tree, and people would come and dance in all that dust and all. And while that was going on, we, wearing white coats, would put Shepherd tubes in one pocket, the samples in the other pocket, and we would just walk through the crowd of people. They'd put out their arm, and we'd take their blood. I'm sure it wouldn't be allowed today. I got pretty proficient at taking bloods. In fact, I sometimes help out now in the hospital when they try for a while to take my blood. I say, "You want me to do that?"

Because we did so many of them. I mean, so many of them. The music, which we played loud, would attract the people, and while they were there, in a big carnival-like atmosphere, we would get all these blood samples from this mass testing.

And then we would send them off that night to the State Board of Health in Jacksonville, and then they would send the reports back and we would do follow-up on those bloods. We were trying to find syphilis. We found a lot of latent syphilis, but we didn't find as many cases of primary and secondary syphilis as we hoped we would because it was through serologic testing and not a physical exam.

So I did that on that mobile team for 2-4 months, something like that, mainly in the Daytona Beach area and in the small communities near DeLand, Florida. Then a VD Rep was needed in Tampa, covering Pinellas County with St. Petersburg, and Tampa, including Hillsborough County. So I was sent to Tampa, and I worked there for, well, from '57 for about 3 years. And then, besides those 2 counties, I worked on a regular basis for 3 clinics—one in Pinellas County and St. Petersburg, one in Tampa, and one in Plant City, the strawberry capital of the world, about 30 miles east of Tampa. So we managed those clinics, interviewing for both gonorrhea and syphilis, but our primary concern was syphilis. And then if there was an outbreak in Naples, or somewhere along the west coast, the so-called Gold Coast there, I would go down to Naples or Fort Myers or wherever, and do interviews, and then trace people and get them into local clinics for treatment.

**Harden:** Then after you did this, you moved to Philadelphia. You were doing the same sort of thing, I believe, in Philadelphia?

**Hicks:** Yes, but it was altered a little bit. When I got there, we had city employees as well as federal employees, assignees, in the same group in the VD part of it. There was a senior federal assignee, fellow by the name of Bill Hamlin, and I went in as sort of his assistant. The reason they brought me up there, I think, was because I was having pretty good success with the interviewing technique. I thought it was kind of fun, you know. I went through school in Atlanta to do it, and they test you there and I got a perfect score. So I guess based on that and my work later (I don't mean to be saying anything other than what happened) I think I was selected there to try to rescue some of the interviewing failures in Philadelphia. So I spent an awful, awful lot of time on reinterviews, to get contacts who weren't obtained before. And then, gradually I evolved into other activities there.

**Harden:** The other important thing about Philadelphia is that you met your wife.

**Hicks:** I did.

**Harden:** And married, and then moved in '63 to Raleigh, North Carolina. And by that time you were Chief of the VD Program and coordinator of the co-op program, which you had come up through.

**Hicks:** Well, North Carolina had always been a heavy co-op training state-probably the largest in the country. And there were times when we probably had 30, 40-odd people in training there. So the assignee in the position in Raleigh, by arrangement, primarily on the part of the state, inherited the title of Chief of the VD Control Program, or VD Program, whatever it was named. And so the state looked at me as head of the VD Program. I was an assignee at the GS-13 level, according to CDC. So I was one of those federal assignees doing work for the state and carrying a state title. And I stayed in that for about 3 years, until I got the call from Billy Griggs, offering me the job in smallpox.

**Harden:** I want to come back to that, but I want to divert for 1 moment and say you also adopted 2 children during this time. And you're going to tell us a little bit later about the problems you had in Africa.

**Hicks:** Well, yes, I had a serious problem with one of my sons. But now they are both beautiful young men, who have reached that age when they have families of their own, and I can't even think about them without filling up, I have so much love for my boys. And they're both doing extremely well, with families of their own.

But my concern was, when we had those 2 children, I think it was Bill Griggs who said, "You have to let those arranging the assignment know they're adopted, that they're not natural birth, because you've got to have a birth certificate, all that, to get visas, and passports, and this kind of thing" We didn't have the final papers for my youngest son, Stewart, and they weren't due for another year. So that meant I had to get a waiver, and I made it clear to the folks in Atlanta that, if I can't get clearance on Stewart, we're back to ground zero. The deal is off, you know? But by that time, I was wrapped up in the program and the excitement of it, and so fortunately we got a waiver that allowed the follow-up to be done in Lagos, Nigeria,

where we were to live

**Harden:** All right. Now I want to drop back and say, here you are in Raleigh. You're the Chief of the VD Program. You've risen through the ranks and obviously done very well. So when they were looking for someone to be the head of the operations part of the smallpox program in the regional office, you were a natural choice, I think. Would you tell me who recruited you, and what they said?

**Hicks:** Well, Billy Griggs was the one who made the call to me. I think it was June of '66. And he and D.A. Henderson [Donald A. Henderson] apparently had discussed me and my track record up to that time. You'll have to get more from them as specifically why they chose me. But I was glad they did. Being in North Carolina, I had obviously heard about the smallpox/measles control program, but most of what was going on I didn't know about.

Billy called and asked me about the job, and then when I told him about Jimmy and Stewart and that I did need to get a waiver, he said he was sure that they would be willing to do all they could to help me in that regard. I was grateful for that. The leadership in CDC has always been that way-for my family, and I've witnessed it for so many other families.

I came down to Atlanta in '66, July the 1st, I think, may have been the official date. It may have been a few days off from that. This was during that period of time, 3 or 4 months, when people were being trained to go to West Africa. I spent part of my time in French language training because I would be covering not only an Anglophone country but also French-speaking countries. So to get that francophone requirement, I took French again. I had studied it earlier in school. I was also preparing job descriptions for those who would go to Africa. I particularly remember working up Gordon Robbins, our Health Educator for the project. He was a very bright, capable guy, and helpful in my attempts to get him nailed down for the program. It was things like that, and cable traffic overseas, and different projects that would have to be done to keep things moving. The EIS (Epidemic Intelligence Service) folks were putting on training in virology and assessment and things of that nature.

**Harden:** Were you taking training and also trying to get organized with the people you had to help?

**Hicks:** I was, but there were a lot of sessions in the training I didn't get in on because these other things were felt to be more

important. We were all very busy. At that time, there were maybe 40 families holed up around Atlanta in different motels, including the Emory Inn, but they were all over the Atlanta area. Well, I had this young child who I had just adopted, and so my wife, Dorothy, and I decided that we would leave her and the 2 children in Raleigh and I would commute home on weekends. Eastern Airlines was on a strike in 1966, so you had to resort to rail travel, which wasn't bad; there were 2 terminals in Atlanta, and if you missed a train going into one station, you could usually pick up another in the other terminal. Seaboard, Coastline, or whatever.

There was one train leaving from downtown Raleigh at about 10:00 on a Sunday night. I would usually take that train and plan to get off at the Emory station near CDC in the morning. Emory was a small train station, down at the foot of the hill on Clifton Road. It later closed and became a restaurant for awhile. I'd ride the train all night, have breakfast on the train, and then get off at the Emory station, walk up the hill, and go to work. I would arrive in the station about 7:33 or something, so by 8:00 I was up the hill, ready to go. That worked fine for the summer, when I couldn't use the airlines. Dot stayed in Raleigh, where she was more comfortable, and there were so many requirements on the part of the new adoption procedure that she had to be close by or else she'd be doing a lot of traveling. So basically, that's how that worked out for us.

**Harden:** So, were you the person, then, who was getting the complaints from the people who would be in your region, in terms of, get us over there, find us housing, help us get settled?

**Hicks:** Depending on who initiated them, those primarily went to Don Millar [J. Donald Millar] (on technical aspects of the vaccine, virology), or they went to Billy Griggs (on equipment and program operations). But it didn't matter who got it; everybody was together on it. The organization was not nailed into place at that time. I had made a quick trip over in the early fall to Lagos because we were having some housing problems there. Billy Griggs had gone over before me. I don't know how he accomplished things so quickly, but he's a gifted guy, when it comes to management. I would say, he's a very gifted guy. And so a lot of that was done. I was going to manage what was then determined to be a line position out to the field, for equipment, supplies, money, bodies-this kind of administrative operation.

**Harden:** So, when did you move to the Lagos office and stay there?

**Hicks:** I think it was some time in the early part of November of 1966. We wanted to get operational by January 1 of '67, and so much had to be done. When I first went over there, we were operating the regional office out of Muriel Roy's apartment. She was the secretary for the regional office and lived nearby. Well, that didn't work for very long. My chief concern was getting into the building across from her and having a legitimate headquarters, not working out of one's back pocket.

**Harden:** Were you there ahead of the other folks who were going to come and implement the country programs?

**Hicks:** Some got there ahead of me and were making do with contact with Atlanta and with the USAID [US Agency for International Development] representatives because this program was under their funding.

**Harden:** Did you have to deal with them directly?

**Hicks:** Oh, a lot. An awful lot.

**Harden:** What kinds of interactions did you have?

**Hicks:** All cable traffic concerning any issue came to the embassy, so any communications we received came in through the embassy and were directed through the USAID people to the regional office.

**Harden:** And I understand that if you were in an Anglophone country and wanted to cable a francophone country, or talk to one, you had to go through London and back to Paris?

**Hicks:** We did it through the embassy, but they had selective ways of handling communications. Even though I had a top priority clearance, it didn't make any difference when it got to talking about how the embassies communicated. I got to be good friends with one of the embassy people, and I asked some simple questions. He said, "Jim, I can't share anything with you on this. That's just privileged information on a need-to-know basis." It was difficult, oftentimes, to communicate from one country to another. It was easier with the embassy, it seemed, to get a cable to Atlanta. Not always, because you'd go through the same procedures. And don't forget, for much of the time there, a civil war was going on, and there were priorities that

a lot of people felt were higher than what smallpox was doing. But the beautiful part of it, in spite of all that, was the job got done.

**Harden:** The job got done. My understanding is that the regional office was originally conceived to do one thing, but there were some difficulties with Atlanta and USAID. Would you talk about those problems?

**Hicks:** Okay. If you were to look at it in one way, professionally, the greatest problem that I, Jim Hicks, saw there was communications, followed by transportation. Those were the 2 main problems that we faced.

**Harden:** Would you explain a little more?

**Hicks:** Okay. Communications would lag. Sometimes they wouldn't go through. It was very difficult. You had to make reservations for long-distance calls if you wanted to reach somebody with the normal telephone service, and that was very poor. You'd get cut off, and they did a lot of rerouting through Europe and whatnot. All of that, I never paid much mind to.

I just knew that there was some serious lag time in getting through to Atlanta. The regional office, in the beginning, was looked on as the headquarters here, as having the overall responsibility. So here in Africa is the regional office, with almost lateral positions with various disciplines in Atlanta. The regional office in the beginning, I think, was primarily designed to serve as an in-line focal point. But the communication was so bad that people gradually would simply tie in to who got them back the quickest answer. And if a guy is sitting in-I'll just use this for example-Dakar, Senegal, on the furthest western part of West Africa, he could communicate to the States a lot easier usually than somebody buried up in Dahomey (the country that later became Benin).

Communication was a big problem. That was the most serious problem to me. And when you have that kind of communication, things get misunderstood, and then they get worse. So some out in the field, based in Guinea or somewhere, might feel, well, you know, who is supposed to give me the information? Regional office? I don't get a response. Atlanta? Maybe I'll get a better response. So I'll just deal direct with Atlanta. Well, then that caused more problems, see? It caused bruised feelings. You know what saved all of that?

**Harden:** What?

**Hicks:** Relationships established in that summer program in Atlanta, and among people who came out of Public Health Advisor programs, who knew the players. It's hard to stay mad for long at somebody you care about. And obviously, the people in Atlanta cared about us in Lagos and West and Central Africa, and we liked the people who cared about us in Atlanta. So even though these things came up, understandably, it wasn't disruptive in a serious kind of way. It was just one of the problems you dealt with.

**Harden:** And this was your most difficult professional problem?

**Hicks:** For me, it was communications. Operations Officers in the actual countries might come up with something else. But for me, the most difficult thing was the communication-and transportation.

**Harden:** Tell me some more about the transportation problems.

**Hicks:** Well, you had a Pan-American flight from the States out, a couple of times a week, maybe 3 times a week. The transportation throughout Africa was mostly by Mali Airlines, Ghana Airlines, Nigerian Airways, Air Niger, and others; and these different local country airlines often had other priorities. Their concern, when they started flying, was, hey, we've got to get tied in with Paris if we're francophone. We've got to get tied in with London if we're Anglophone; we're going to get tied in with Europe, you know? And a lot of the traffic was back and forth with expatriate help into these countries. So there was more concern to develop the airline system between Africa and Europe. At least that's the way it seemed to me.

Sometimes you wondered whether they really cared whether they got some goats, or tombstones, or something else, from Dahomey to Lagos, or from the Cameroons to Gabon. That inter-country travel didn't seem to have the attention on developing countries as getting tied in with Europe. I remember once George Lythcott had to get back for a very important meeting. I don't remember whether he was in Ouagadougou, or Bamako, but somewhere in the central part of West Africa. And he'd figured out that the only way he could get back was to fly to Madrid, and then from Madrid to Lagos. He could have come across in the normal manner, but it was much, much quicker to fly him to Europe and back down again. So, there was occasionally travel like that.

**Harden:** And did you have trouble moving supplies for the people in the

field because of that, too?

**Hicks:** I'm sure we did, but so many of these supplies were offloaded at the respective country and did not come to Lagos for further shipment. There were some that went out from WACS, the West Africa Consolidated Service, which was operated with US and country agreement. But primarily, things were delivered by ship or air direct from the States and offloaded in the country of concern.

**Harden:** You had a serious personal problem, too, that you had to deal with, with your son. Would you tell me about that?

**Hicks:** Well, my oldest boy at the time was about 3 years old. He had severe asthma. He had been treated in Atlanta, and at Duke University, and different places before going to West Africa. I had to get a medical waiver on Jimmy, and a legal waiver on Stewart. All this did add to my personal problems.

Jimmy had bad times of it there. In fact, in 1968, on a trip that Dave Sencer [David J. Sencer] made over there, I guess because of my feelings, he didn't want to really tell me personally. He could do it better writing. So he wrote a beautiful letter that just frankly told me, "Jim, I think you're too close to the problem. You should think seriously about coming back to Atlanta." To illustrate with one related incident, one time I was in The Gambia, which is like a dagger in the heart, some say, of the surrounding French area of Senegal. I was in The Gambia, which is an English-speaking country, just a little narrow country, which followed along the Gambia River, extending a few miles on either side of the river. Well, that's where I was, and I got this cable that said, "Come home immediately. Your son is in very serious condition." Well, I didn't know what it was, you know. It could have been illness; an automobile accident; or it could have been the war. And which son? There was no cell phone to pick up; there was no computer or Internet. There was none of that. So you just tried to get back as soon as you could, which might be a day and a half. I was fortunate to be able to do that. But anyway, I got back, and it was Jimmy. I had tried on the way home to put 2 and 2 together and I did think it was probably asthma because Jimmy had had many of these attacks. He was very, very seriously ill then and a number of other times. So, the greatest problem of the West Africa program, are you talking about program-wise? Communications. Are you talking about personal problems? My son Jimmy's illness.

The communications problem got solved, to some extent,

just with time. You find ways to get around things. Everything was working, and progress was being made. So there was a lot of forgetting; there was a lot of overlooking. There are people who in excitement may say one thing, and you've got to say, "Well, wait a minute. I know good-and-well he didn't mean that." So it was relationships established that took care of a lot of misunderstanding.

Ultimately though, the difficulty with communications, I think, was a major cause of the demise of the regional office. It changed from what it was intended to be and became more of a storehouse of knowledge and help in certain areas. Because we had a virologist there, a health educator, equipment specialists, and so on. As a Medical Officer, Rafe [Ralph H. Henderson] was heavy into epidemiology and virology and the management of those disciplines. And George Lythcott, bless his heart, had to spend so much time, with his enormous gift of diplomacy, dealing with people, whether they were foreign nationals, expatriates, or our own people. He had a great deal of charisma, a great deal of ability to deal with people. So that was a great help. You add all those things together, and though in the beginning, in 1967, things were troublesome, they worked themselves out to a certain degree, but not totally. Because the way you got rid of the problem, essentially, was to move a lot of the problem-or a lot of the intent of the regional office-back to Atlanta.

**Harden:** I see. Were there any unique occurrences that you would like to talk about?

**Hicks:** Oh, there were so many. The whole program was unique. You could just pick out almost any of them, but the best illustrations of those unique problems would have to come from the Operations Officers in the respective countries. Well, we did have one unique occurrence in Lagos, during the war, when a Fokker aircraft from Benin, in the midwest region, was taken over by some mercenaries and Biafran sympathizers. One night, it was about 1:00 AM, we heard this awful, awful explosion. The Fokker aircraft had been taken away from the Nigerian Airlines, flown to Biafra, and 5 white mercenaries and 4 Africans came on a bombing run. And they came over Lagos. We pretty much figured out they were on the way to Dogon Barracks, where General Yakubu Gowon was, who was the head of the federal Nigerian government. The Ibos over in the eastern section of the country were the ones who were doing the bombing. Their bombs, however, were 55-gallon drums, or something in that neighborhood, and they were constructing Molotov cocktails of that size, and just pushing

the barrels out the door of the plane. I think they got 2 off. There was some damage done. The drum would break, causing primarily explosion and fire. But the plane blew up in midair, very, very close to the regional office. It gradually got pieced together during the investigation that they had simply tried to use a different door, apparently, in the back of the plane, to push one of these barrels out, and it was already lit, and it wouldn't go through, so the plane blew up in midair. They recovered 9 bodies, or the remains of 9, 5 of them white mercenaries sympathetic to the Biafran cause, or paid by them.

Muriel Roy, our secretary, got hit with flying glass, and if she hadn't been wearing a kind of heavy bathrobe, I guess it was, she'd have got hurt bad. It blew out most of the windows in the regional office across the street and caused some other minor damage.

Another unusual thing I remember. . .Lagos at that time was getting black-and-white television. They had a little television station that was not very good for anything, but it was there, and it was better than nothing. You saw antennas on many rooftops. Well, the explosion twisted Muriel's antenna, which had never worked very well, such that she started getting pretty darn good reception.

I remember an incident that was unique to me. It's not of any real importance, but it's something those of us who were there when it happened have chuckled over. We were on our way back from a regional conference in Yaounde, Cameroon, in early '67 for the OCEAC [Organization de Coordination pur la Lutte contre Endemies d'Afrique Central] countries. We had had a successful time up there and were all heading home. Some of us were on our way back to Lagos, and we hit some turbulence just outside of Lagos, as we were making a long approach into Ikeja Airport. The service personnel had taken all of the meal trays and put them on an open rack normally used for luggage, like you find in buses and trains. All these trays were stacked up there, but what we didn't know at the time was that they weren't tied down. Well, I'm in the seat underneath them. So when we approached for the landing, the plane made a violent wobble as it sometimes does in turbulence, and the trays all came down. Well, they didn't come down on the floor; they came down on Jim's head. So they hit the top of my head, and out I went.

They told me later that a French physician from Senegal who was on that aircraft got up to see if he could do something to help me. So I later found out he undid my collar (I had a suit on with a tie), and he undid the belt on my trousers. Well, he went and sat back down because we were coming in for the landing. So I didn't know from anything. So when I came to and

got up, everybody's still seated in the plane because they're going to unload us from the front to the back. It was a small aircraft. But anyway, I stood up. My pants dropped straight down around my ankles, and I stood there in my underwear on that plane. Everybody on the plane had a good laugh. Anyway, that was unique for me, but it doesn't have any value to the West African program.

**Harden:** In 1968, you came back to Atlanta, and were named Chief of Operations of Area A, which was a 12-country area of West Africa. Now, tell me what that job was, and how it was different from the regional office.

**Hicks:** When we first went into Africa, Medical Officers and Operations Officers were assigned to one or more countries. Nigeria was divided into 4 regions. A Medical Officer was assigned to head up Nigeria and, because of the size and population of Nigeria, other Medical Officers were assigned to the 4 regions. Operations Officers were assigned to work with the onerous chores of keeping trucks going, Ped-O-Jets and refrigerators operational, and other logistical support. The Medical Officers had a tremendous schedule of dealing with virology, assessment, surveillance, and other things, and a lot of the things that the Operations Officer could have helped with, he couldn't because he had to train people to help with equipment repair and Ped-O-Jet repair. One of the early-on problems was axles. They broke all the time in those Dodge trucks. Particularly the W-200. A lot of broken axles, and that was a real problem.

So in the beginning, in early '67, with all the problems in communication and that enormous challenge that faced us, I remember George Lythcott asking me, "Jim, do you think we're going to eradicate smallpox?" And I said "No, but I am grateful as grateful can be that you and I both, George, are going to have a shot at it. Because," I said, "I think we can reduce the morbidity such that we will save many, many lives." You know, when we started the program in '66, there were 40-something countries endemic with smallpox. Seven of them were in that West African program, and at that time, there must have been 3-1/2 to 4 million people dying every year from smallpox. Well, if you've got that kind of problem, and you can reduce the morbidity so that 25%, maybe, of the morbidity doesn't become mortality, then you've made a big jump. And I was trying to get that point across to George, but he already knew what I was talking about.

**Harden:** Let me follow up on that. When did you finally feel that

smallpox would be eradicated?

**Hicks:** For me, it was in April, May of '68. And why do I say that? Because in January of 1968-just 13 months after we started in January of '68 in Accra, Ghana,-we had a celebration of 25 million vaccinations. Well, now we're pumping out a lot of vaccinations. There's something like 105, 110 million people, maybe, in the overall area. The statistics are hard to come by with accuracy. But out of all that, 25 million in 13 months, something like that, I figured that, yeah, we're getting people vaccinated. But that wasn't really it.

You see, to me this whole program was a Gordian Knot from the beginning. You had smallpox around for 10,000 or 15,000 years. And people dealt with it, and it would be clean for a little while. Then there'd be another outbreak, and it went on and on. It was a Gordian Knot. It was unsolvable. You couldn't get it answered because you couldn't untie the knot. All right. Here's where the big change happened. Alexander the Great may have cut with one fell swoop the Gordian Knot that couldn't be untied. I think we had 2 fell swoops, backed up by a lot of support.

I think the first one came from Bill Foege [William H. Foege]. Bill Foege was a principal architect of what we called "eradication escalation." E-square, we called it. And that was presented, as I remember it, about May. It was based on his early work in the Ogoja Province, over in eastern Nigeria, before he had to leave when the war broke out. And it had to do more with identifying cases and then containing those cases, rather than just willy-nilly going across the country from one side to the other, vaccinating people. When I saw what eradication escalation could mean to the total program, that was the first cut through the Gordian Knot. The second one, Don Millar. Don Millar bought and understood it clearly from the very early conversation about it. But Bill's original ideas wouldn't have gotten anywhere if Don Millar had not said, "Hey, we need to do this as an adjunct of mass vaccination; we need to implement this." Well, it all came out in April, May, something like that, in '68.

Now it was about that time, after I knew about E-square and I saw vaccinations going on in the area, that I made up my mind. Exactly right then, I did a flip-flop. And George Lythcott asked me, "Jim, you know when I asked you this probably a year ago, how about if I asked you now? What do you really feel, now that we're in the program, been in it a little over a year: are we going to be able to eradicate smallpox?" And I said, "I've done a complete flip-flop"-those were my words-"I've done a

complete flip-flop. This disease can be eradicated." And I believed it. Now, a year before, I thought we'd bitten off more than we could chew, but that it was still very, very important to reduce that morbidity. So that's where I was coming from on that.

**Harden:** Beautifully said. When the West African program ended, you continued to work with smallpox eradication in the rest of the world. What special expertise did you see coming?

**Hicks:** We need to back up a little bit to the summer of '68, following the letter from Dave Sencer about Jimmy and his asthma, which he wrote to me in Lagos while he was actually there. Then I knew I wasn't fooling anybody, and I then began to realize seriously, "I may be putting my child at risk" because medical care there was not super. I had mentioned to Don Millar that I had to come back, and I would much prefer to continue on in the smallpox program.

Well, up until that time, Henry Gelfand had 12 countries in West Africa (Area A) that he was responsible for from Atlanta. Bill Foege had primarily Nigeria and, I forget, maybe something else; that was Area B. And then Area C was Mike Lane [J. Michael Lane], the OCEAC area, over at Cameroon, Gabon, Chad, that area. So the long and short of it, I came back to play a role in Atlanta with the Area A countries when Henry Gelfand left.

That pleased me immensely because now I still had direct operational opportunity to help these people in so many ways. And don't forget that these people now meant something to me. They meant a lot to the eradication of smallpox. But one of the greatest joys in this thing was working with people who were gifted, and who cared about each other. And they cared about millions of people they didn't even know. Now, that was important to me. So I wanted very much to stay put. And Don Millar saw that I could do that job, and so he brought me into that, for which I'm very, very grateful. This was one of those early examples of an Operations Officer, a Public Health Advisor type, being able to step into a role formerly held by a Medical Officer. Because it was management, and we could get things done through other people in management as effectively in one discipline as the other. So that's how I got into that. Then, Bob Hogan [Robert C. Hogan], another Operations Officer, came back soon after that. And now, Lane and Foege could go on to other important things, to directing the program itself.

We still had a tremendous amount of money being dumped into protecting the country from smallpox. Now we've got no

deaths from smallpox, but we've got deaths from smallpox vaccination complications. So when you add all this together, we had to do something from a humane standpoint, from an economic standpoint. What were we going to do as our domestic policy? So I got involved in some of that. Then the case manual was written. We had to go out and talk with State Epidemiologists about control activities in a smallpox emergency, something like that. So that's how I stayed on with smallpox. And then from that I gradually became Deputy Director of Nutrition, and from there Assistant Director of Management for the Center for Infectious Diseases, under Walter Dowdle.

**Harden:** Coming back then, if you were going to do this program over, the smallpox program, what would you change?

**Hicks:** Well, this is unfair because if I were in the shoes of any of the principal players in 1966, I daresay I would have done it the same way. So in hindsight, I'm really doing Monday morning quarterbacking, and that's awful easy to do. But you have to consider that I lugged around something to compute that probably weighed 20 pounds, which was an iron cranking calculator. The Dutch made it. If you pushed this lever down, it would multiply and divide. But lugging that thing around, and you can buy something that'll do a lot more than that for 3 bucks at Walgreens, or someplace, and it weighs ounces. But in any event, the difficulties we had then, no computers, no cell phones, no emails, none of that stuff. So I'd have done it the same way, probably.

But to do it over again, if I were stepping in now and facing the same problem, I would not have put the regional office in the plans. I would have had the senior Operations Officers and MDs in Atlanta with responsibilities of specified countries. They would travel frequently to determine problems and help assess the program operations. In this way, they could share problems with others in headquarters and do business with cable traffic and regular scheduled phone calls-whatever was needed.

George Lythcott had several years' experience in recent work in African when he came to CDC. He would have been extremely effective with his diplomatic skills, medical knowledge, and high-level contacts in West Africa to service as a sort of roving ambassador and personal representative of Don Millar. George had demonstrated his exceptional skills at the very highest level to settle major problems in Africa with the Liberian program before he left for the regional office.

That's what I'd do differently. I would not have the

regional office.

**Harden:** Once smallpox was eradicated in the world, in 1977, you were awarded the Order of the Bifurcated Needle. Would you explain this for the record?

**Hicks:** I wish I could, totally. All I know, it came to me one day, but not to me alone. I have seen at this reunion some of the guys still wearing the little twisted bifurcated needle. WHO [the World Health Organization] was looking for something to let those who participated actively in the eradication of smallpox receive as an award. I participated, but look at the hundreds and hundreds of others. It was not anything unique to me. I'd have been way down the line. There are so many others who received it with more input than I ever put into the program.

**Harden:** No, but I just think this is the neatest thing because people give awards for military accomplishment, for various and sundry other things, and they may not understand the impact that people made with this little bifurcated needle, in terms of contributions to humanity.

**Hicks:** Well, the bifurcated needle was a turning point in the total vaccinating procedure in the countries. You could go train somebody in a hurry, with no doubts that you had the right amount of vaccine between those forks. And when you put it into the arm, it took. That was a great turning point.

So it was a thrilling time. I am thankful I had a part in it. Time will tell, but I certainly think enough time has passed by now to show the world that there's much learned in the smallpox program that can be applied to other things. I know with me, personally, it helped a great deal. I went on to do other things at CDC that required a lot more managerial skills than I had before I went into the program. But when you're thrown into the fire, so to speak, you learn rapidly. And the school I worked in, the people were just so dear to me, even to this day.

**Harden:** Before we stop, is there anything else you'd like to add?

**Hicks:** Well, I've talked way too much. There are lots of people who can give you the other things that may be missing, but I appreciate the opportunity to share what I have shared, and I hope I've done it in a way that might be helpful.

**Harden:** I want to thank you very much. It has been just a super

interview. Thank you for speaking.

**Hicks:** Thank you, Victoria.