GLADYS WEST

Introduction	MUSIC
Gladys West	I'm Gladys West; I came to Dahlgren in January of 1956 which is a long time ago. I had gone to graduate school and was trying to look for a job so we just looked at all the job announcements and all and so I applied to several government positions and also two teaching positions and I got a job in Martinsville teaching and just by the time I got that job, the job at Dahlgren came through. So I resigned from that one and came to Dahlgren in'56 and I stayed here for my entire career. I went to grad school, studied math at Virginia State, and then after working for a while I went to grad school and I studied Public Administration and then after I did that I did a doctorate in Public Administration. At that time my title was mathematician but just as I was coming to Dahlgren they were getting a new computer in. It was the NORC, Naval Ordnance Research Calculator, and they were just installing it so until that got really operational I did hand calculations on a marchant calculator, you know, we had to verify data. (Interrupted-noise in background) We had to verify data like if you-somebody had already computed some data and they made a lot of bombing tables, well they like to verify that that data was right so you had a certain section that you took and did hand computations to see what kind of answers you got for that. There was somebody else who was really doing the range table, uh we call them bombing tables I guess, they had all these items laid out, you know, that they had done computations of, so I didn't work directly with the table, I just worked with-if someone said well verify these heights, and I just did those calculations and I did that until the new computer was installed. Then I became a programmer for the new computer so I learned how to program and code scientific algorithms and programs. I guess I wanted a job I guess, so I never worried so much about how much I enjoyed the job I guess, as long as I had a deadline, I met something and kept going. As I look back now, you did have to sit in one spot, you didn't move around a lot, you know, that kind of thing. I didn't mind that part, you know, at all. Looking back I would think maybe I would have liked something different if I had qualified myself for that kind of thing. It was satisfying beating my goals and things all along. That was the biggest computer in the Navy at the time that they installed, so that was exciting because it was so fast and you could code much

larger programs, you know, we felt the speed. It had 2,000 locations of memory, that's nothing now but it was great. Then—and so I worked on that, after, I don't remember how many years but a new computer would come in and I guess they would call it a Stretch, and I programmed and coded for the Stretch. And each time I'm still working on the scientific kind of problems.

We started working with satellite data a lot, because there are different stations, satellite stations placed all around the world and they would get data in and we would have to code algorithms to sort of verify the data that we were receiving and then I worked some with geoid Heis because they were trying to measure exactly where the satellite was and where things were and so I did—geoid Heis had to do with the undulations in the water and so fine tuning, it was fine tuning that measurement, that distance from the satellite. That was sort of interesting; those are the forerunner of the Global Positioning System. When you look at the big picture it was great, you know, but when you're working you got to be detailed, making sure you're accurate. And so we got also to meet a lot of important, brilliant scientists and all. The name Dr. [Charles] Cohen, he was one of the leaders in our area and Dr. [Richard J.] Anderle, these were the people who did a lot of the research and created the problems and the real head of our group, our department was Mr. [Ralph] Niemann.

Yes, K Department. You know, now it's so—things are so different now than they were back then, but he was a leader back then, in that time. He was a leader in bringing new things in and bringing different people in.

Yes, because, I mean, I came in under him. I guess and also, you didn't mention anything about race but he also brought the blacks in too.

Oh probably, 5-10 years I guess and then there's always something else that comes. Now you say that I can't even remember the name of the last one that I programmed for. But anyway, they were a lot of the same, the thing being that when we first started a program, you had one cell plus another cell and then you put it in a third cell kind of thing but then when you got the four train coding you can just write out an algorithm, you know, without all this, you know, register to register kind of thing, that was really great.

And we –when we would debug, we would debug in bits, you know, like, on and off, plus or minus, you know, and this one is on and whatever. And so now we've been doing the other way you never get down to that level, you never get down to the bits. So that was sort of like a lifting up and you could sit back and look at your code and see you can see the algorithm and the code because you swallowed the algorithm when you coded and the other one was so—

Yeah. So what else did I do? I always took courses and all because we lived on

Dahlgren and there was not much available for the young people so they would give us, I guess, some pluses for taking a course, so if you took a course sometimes you wouldn't have to make up your time. Or you know that kind of thing and you didn't have to pay for your books and all kinds of incentives. So that means that since I was sort of like a book worm I always took courses. And we had three children and my husband worked here too. I guess, we just never—you know how you get working and everything is going all right and you never get too excited about anything. But the first one, the school went through 8th grade, she graduated from that school on the base.

I met my husband there too. I remember the first day I came to work, I didn't know anything as exciting. And we had three children, three. I guess one of the questions you were saying was, what was the conflict between family and work and all that kind of stuff too? We had a full-time housekeeper, so that made it good because there was always someone at home with the kids if they had to be sick or whatever after they started school. And then as far as an illness and all my husband and I traded off a lot of times to take them to the doctor but they were never sick very much because we always took them early when we knew something was happening. We took them to the doctor early so they never got any really involved illness and that kind of thing.

I think I was hard on myself because I didn't want any interruptions, in order to be flowing smoothly. Yeah, they were very compatible with having children and working.

Well I sort of grew up a little bit, such that before I ended I was managing some people underneath me.

No, where I finally ended up, I went to F Department where we were actually—went out with the satellite, wherever the satellite was and travel a lot overseas and solve the data. We delivered data and software to people overseas at the different stations to collect and then analyze it. I sort of grew up in the same—the programs weren't the same but the general idea of them were the same, the general scientific programs doing different things. [I] always worked though in some way with satellite data, the geoid Heis from the undulation of the Earth and it being different combinations.

I didn't because of the kids—well, that's another question I think you were talking about too. When we first started, women didn't seem as much a part of the upper level of management so you were always working, so therefore I didn't travel as much and, I guess, I wasn't that excited about traveling after I had kids. But then my husband retired before I did and after he retired and the kids were grown, I traveled with family. I got to go to places like Guam-we had a station in Guam and one in Spain, where the satellites had given data and data

was collected and we had software that we used that data at that station, we did some of that. But I'd been to California and stuff like that and we had a lot of meetings in Washington and that. But I didn't travel a lot until after the kids were grown.

I didn't go on the ships and they said it was a little hairy in there. I guess when I would travel, I guess [it was] very seldom that we had a military person, every once in a while there was a military person and mostly it was civilians, all of us who were civilians but things were a little hairy with maybe women traveling to begin with you know, I guess, it's always special when there's a woman, that kind of thing. I didn't deal with the military enough to feel any idiosyncrasies about the ships, you know, and the quarters.

Well I think, I guess I don't think initially yes because it made it more inconvenient for everybody if women were along but then later it's different as time passes, it's very different. But for the racial thing, at an earlier time women or men had a hard time traveling because we weren't allowed to stay over.

I started in '56 maybe '56 to '57. You just couldn't stay at a certain hotel and stuff so therefore rather than embarrass the person and whenever and wherever, I guess they didn't carry you. And a lot of times too, to get ahead and do things you had to sort of be at the top of the project you couldn't stay at home all the time or your project wouldn't be sufficient just to stay at home.

I would think initially it would have been African-American, I would think. It took the world awhile before they really accepted that and sometimes they still don't, I guess. So if you work on a project with someone and you know you got an Afro-American under you and you know you're going to have to travel you know that person is going to have to go with you and you know that you don't know where they're going to stay or eat or anything and you like your people and you want the best for your people and you can see how that person wouldn't get to go. That kind of thing. I guess the woman thing, I guess they were together, I never experienced the woman thing so much until I recently now look and I see that women are being put in leadership positions more so than at that time and the Navy just that we got to grow and get used to women being in the field and knowing something, you know. And a lot of women now, since my time, they've had good experiences and they're excited and they want to be a leader and they want to be at the top of the project and all and so I guess the world is more accepting than it was earlier.

Yeah I thought it was a real good experience. I probably could have challenged myself, I guess I tried to do everything too like I tried to raise a family, do everything. So you had to be a certain amount of, you know, not rocking the boat too much because you can't do all of it and your work and you can't leave

	the rest of the family so I sort of moderated, you know, and did all right.
AT:	How long did you work at Dahlgren?
Gladys West	I think 44 years. I think that's right, I didn't look it up but I think that's close.
	I would think the last few years I was there I felt more free than I did before because the kids were grown and my husband had retired and I was there by myself and we could travel so I think that was probably a good time. The other parts were good but they were learning experiences, you know when you're newer, they're all sort of learning experiences and you're sort of walking easy because you want to learn this and get better and that kind of thing. But when you get to the end like after 44 years, you know, life is different.
	Yes, all the way up. You want to look good for your school, for your family, for your boss. So you do that all the way along and each time you get a new project or new something it's a little different so you got to prove it again.
	What did really I enjoy the most? I think as I got more senior and whatever that I did not enjoy being on the bench as much because it sort of frees you up and you think differently so that's how I changed my schooling, I guess, management, I had a degree in management or public administration really. They had programs that came down from the University of Oklahoma and they would teach management courses and so I started taking those courses and sometimes they have a little psychology and how you do organizational stuff and all that. So I found that to be sort of interesting and then after I started studying that I didn't want another Master's so I said I'll do something different so I just took some courses from—VPI came down, and I took management courses with VPI and used the course I'd taken at University of Oklahoma as part of my coursework.
	I would say in the 70's, probably I started. That's sort of early, but taking courses probably in the 70's.
	I think at a certain point, especially if you're working with the same kind of people, they sort of know you. You feel somewhat like you're part of the group after you've been there but still that feeling of always wanting to do your best is always there, for me is always there, and making sure that I satisfy and that people like what you're doing so a little bit of anxiety from that point of view, I guess.
	But I feel like I did--made a real good contribution to the accuracy of the Global Positioning System and the measurements of satellite data that I feel that I actually had an impact because I was doing software and we had to verify

	certain things, what other kind of forces that may come into play for the satellite data. And then I sort of felt too, near the end, we were always having—they were always reducing the work force in the Navy, and maybe all military, so they were always talking about who was going to be left and whose gonna lose their jobs and all that kind of stuff. So I got interested in trying to see what was the effect of this downsizing on the people who were left in the organization because if you didn't know whether you were leaving or not, what effect did that have on your work? That's when I wrote that paper on that, so I think that was a contribution. I didn't completely complete it until I retired. [Her dissertation.]
Conclusion	MUSIC