6-26-2003

Joseph Carr oral history interview by Yael V. Greenberg, June 26, 2003

Joseph Carr (Interviewee)

Yael V. Greenberg (Interviewer)

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USF Florida Studies Center
Oral History Program
USF 50th History Anniversary Project

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Current Position: Retired Curator of Natural Sciences and Director of the Planetarium
Date of Interview: June 26, 2003
Audit Editor: Danielle E. Riley
Date Audit Edit Completed: December 4, 2003

Interviewer: Yael V. Greenberg (G)
Location of Interview: Tampa Campus Library
Transcriber: University of Florida
Final Editor: Jared G. Toney

TRANSCRIPTION

G: Today is Thursday, June 26, 2003. My name is Yael Greenberg, Oral History Program Assistant for the USF Florida Studies Center. We continue a series of interviews here in our studio in the Tampa campus library with USF faculty, students, staff, and alumni in order to commemorate fifty years of university history. Today, we will be interviewing Mr. Joseph Carr, who came to the University of South Florida in September of 1960 as a curator of natural sciences. In 1990 he retired as director of the planetarium. Good morning, Mr. Carr.

C: Good morning.

G: Let's begin by you taking us to the year you arrived in Tampa and what circumstances brought you to the University of South Florida.

C: Well, essentially what occurred is that I was at the University of Minnesota for about nine years in the capacity of the Physics Apparatus Supervisor. The reason that I had taken that position is because it was offered to me by the chairman of the Physics Department who had heard about me. He needed somebody to replace a man who took a professorship at St. Olaf, to help design and construct new apparatus for the teaching of physics. About a year after I landed there I also took a part time position teaching

astronomy for the Astronomy Department, which was separate from the Physics Department. Then, toward the end of my time there one of the deans, Dr. Russell Cooper, was taking a position down here at Tampa, Florida. I ran into him in the hallway and I told him my wife and I loved Tampa very much. I had been stationed here at Drew Field teaching electronics during WWII. [I said] if he ever had a position, let me know. Well, I forgot about it but he didn't. He called and wanted to know if I would be interested. He was going to be up there and would drop in for an interview. Well, the upshot was that I was a little uncertain at first, but he said well, we will fly you down and have you look at the place and see if you're interested. Of course I was, so I took the position here at that time.

G: Can you tell me the first time you saw the university campus? What did USF look like in 1960?

C: Well, it looked like a batch of sand and some sable palms here and there. [When the] wind [was] blowing, [it] looked like a desert. There were three buildings. The ad[ministration] building, I believe, was the only one open at the time. I was interviewed there. At first I was a little bit worried as to whether it was going to be a university or a college. So, I made arrangements to meet some friends whom I had known with the civic and commerce commission. We arranged to have coffee down at the Tampa Terrace Hotel, which is no longer in existence, and I asked them what they thought would happen. They assured me that there was just no question, but it was going to become a major university because it was so badly needed in this area. They were hopeful that I would be interested in coming, and I was, and I did.

G: You came down for your initial interview, did you interview with Dr. Cooper?

C: Well yes, I talked to him. I talked to the people in the business office about the possibility of finding a place to buy, a place to live. As I mentioned, I talk to the people. There was a Mrs. June Connor, who was at that time an official in the bank downtown. I had known June from before, so she was the one who arranged the meeting with the civic and commerce people. Based on the things that they said, I decided that well it looks like we want to come. We did love Tampa, Florida, and we were very anxious to come here.

G: You mentioned the idea of talking with commerce officials, the idea that they believed this university was badly needed. Was there also a sense of excitement on campus about the university?

C: The campus was so small at the time, but yes the people were all very eager to prove themselves and to do the right thing. As you probably know, the President was John S. Allen. I met with him, and I was very much impressed with him. I really thought that it would be a nice place to be.

G: You came in as a curator of natural sciences. What were your responsibilities, and what department or college did you work for at the time?

C: Well it wasn't set up as such at the time, but there were really two colleges that were starting out. It was a basic college, which consisted of the first year or two and then the upper college was the college, I forget the name of it now, but at any rate, that college was under the supervision of Dr. Cooper. Well, about two years after I came here they started to construct the physics building, which had not been in existence. About the time that they were partially finished with it I was contacted as to whether I might be interested in running the planetarium. Now, the planetarium had been postulated, right from the word go, by John Allen. He really thought that there should be one on the

campus. Well now, I think the reason that they asked me to run it initially was that I was the only one that had any background in astronomy. I helped to buy the first telescope that the university bought. When it came, I was the one who had to assemble it, and after I assembled it I was the only one who knew where to point it in the sky to see something of interest. I think based on those things is probably what caused John Allen to decide to put the planetarium under my direction.

G: Before we talk about the planetarium, what were you doing in those two years prior to being contacted?

C: Oh, [I was] teaching physical science. The one segment of the physical science course was a segment on astronomy, which I taught.

G: Were students in those early days interested in astronomy?

C: Most of them were quite young, but they were interested in practically everything. It seemed a little strange at first because most of them were not used to what was expected of them. I'll never forget one of the first tests that I gave my class. It was a ten-point quiz, but when I got their papers in it appeared that what they had done was to simply restate each of the questions but they gave no answer. So, we had to go from there.

G: Now let's talk a little bit about the planetarium. John Allen, I believe, had studied astronomy.

C: Yes, he did. Not only that, but he knew Dr. Armand Spitz who was the president of the Spitz Apparatus Company that manufactured the planetarium instruments. At that time there were three companies in business. There was a German firm, the Zeiss Firm; the Japanese firm by the name of Goto; and the Spitz Company. Since Allen and Spitz were friends in a way, I'm sure that he managed to give the university a fair price for the

instruments because he was hopeful that it would establish a planetarium here. Now, at that time there was one other planetarium in Florida that was getting started, and that was over at Miami.

G: Can you talk a little bit about the construction of the planetarium?

C: Well of course the planetarium instruments were installed in the planetarium room, which is on the north side of the physics lecture hall in the physics annex, next to the building. At the time it was originally installed the building was not complete, so it was moth balled. That is to say, [it was] covered with plastic and taped up and so forth, to avoid dust and other debris while the building was still under construction. So, the planetarium didn't actually begin operation until the following spring of the year, in March I believe.

G: Is this in 1963?

C: [This is in] 1962 I believe.

G: So it took a couple of years to build?

C: Actually, the planetarium construction itself went rather rapidly, but the outer structure of course had to be built. On the inside the dome of the planetarium actually came here in segments and was assembled on the spot by workmen and then suspended on chains from the ceiling in the room and then anchored and then, surrounding the outer periphery, a ceiling was installed. The dome itself is thirty feet across. That dome still exists today. It's over at MOSI.

G: Were you involved in helping put together the construction process?

C: No, that was done by contractors. In fact at that time I wasn't sure whether I was going to be involved. I was interested, but I don't think I had been contacted about the operation of the thing.

G: Once the planetarium was constructed, were you contacted after construction?

C: Just before they started to install the instruments I received a letter from John Allen appointing me to be in charge of the planetarium and to wish me luck.

G: What were some of the first things that you did to get the planetarium up and running?

C: There was a committee of people kind of appointed to see that things were going right. One of the first things I had been told was whatever else they wanted to have, they wanted to have a really good story about the Christmas star and wanted me to construct a program around the Christmas star. Well, at the time I didn't know much about it, so I started to poke around. One of the teachers in mathematics by the name of Dr. Don Rose was a part-time minister. I contacted him and he told me a few things about the star. I went up to visit the planetarium up in New York City and also the one in Chicago to see how these people operated and the things that they did and so forth. Then, I came back and started to poke around and cook up a program. Now, at that time one of the people in our English department was Dr. Anthony Zates who had been to Palestine. He had taken a bunch of photographs around Bethlehem and had learned some of the things that were going on there. I contacted him and he, very generously, offered me the use of his slides that he had made. Out of these slides I selected the number that helped me kind of put together sort of an imaginary trip of the wise men from the time they first saw the star until they wound up in Bethlehem. I presented the program and it was very well received. In fact, it wasn't very long before thousands of the schools in the area brought their students to see that program, but not only that program. At first I tried to change new programs every month, but I found out that didn't do because some teachers would like a program, they'd tell others, they'd want to come and see it and it was already over.

So, I had to change things and devise programs every two months, except for the Christmas star program, which I thought was only proper to deliver during the Christmas season. We had thousands and thousands of visitors. Many and many a time I put in as many as seventy-two hours a week or more at the job.

G: Beside Allen's interest in astronomy, why do you think it was so important for the University of South Florida, particularly in its early days of existence, to construct and maintain a planetarium, which I'm sure wasn't a cheap venture in those days?

C: Well, it wasn't as expensive as it might have been, but I think probably one of the main reasons was that at first, in my opinion now, the university was not well accepted by the community. I really think the people downtown felt that the funds that were being spent here should be given to the University of Tampa and expanding their programs and so forth. What they didn't appear to realize was that the state couldn't just give money to a municipality, and besides, as I say, there was a press on the part of many to have a university here rather than people have to go to Tallahassee or Gainesville all the time.

G: So, do you think that the planetarium was one way that the university helped to bring in community people?

C: Yes, I think it was considered to be a very favorable asset by the community. They seemed to be in acceptance of what we were doing. As I say, especially since the schools began to come, not only our own university classes would come but these groups from outside would come. Anybody who really wanted to come was permitted to come. There was nobody who was refused to take advantage of it, and I think that impressed the community.

G: Do you remember the day that the planetarium opened?

C: Not the exact day, [but] I do believe that it was in March sometime. Now, it became evident in a short time that it was almost impossible to try to do everything to receive the schools, to seat them, and then to do the program, and then to see them on their way, and then have another group come in afterward. So, it was decided that they would hire a secretary. I think the first secretary was a Mrs. Nole who was a very pleasant person, well received by the people, they liked her. Her husband wanted to move up country somewhere, so they soon, after about a year, she moved away. Then, the next person who was hired by the university was Dolores Hermson. She remained the secretary right up until the time that it was about ready to close.

G: In addition to running the planetarium, were you involved at all in the budget to maintain the planetarium?

C: We were granted a very low budget actually. The most money that we were given in those days was $2,000 a year. That had to pay for postage to send out notices to the schools as well as any expenses of any kind of office supplies; of paper, pencils, and all the rest of the things that go with an office; so our budget was very low. I like gadgets and I love to fool with gadgets, so I made a lot of projectors out of surplus parts. We went up to Stark, Florida where they had a surplus properties division and got a bunch of odds and ends such as lenses and things of that kind. Out of this, I constructed a whole series of visual effect thing. For instance, we had a cloud projector. When we turned it on before the program, when the room would be partly darkened, there would be clouds going across the sky. Well, it was just a projector you see. I never bothered to keep track of how many different projectors, but I'm going to guess that there were probably in the neighborhood of 100 to 200 different kinds of projection devices that we made. Now,

there were a few such devices that were for sale by some companies. We managed to squeeze out enough budgeting to get a few of those, at least so I could see what they looked like and make others.

G: If you could, could you take me through what the planetarium looked like from outside to inside, how many people it sat approximately?

C: Well, the inside of the building is still in existence. It's now used as a research laboratory by the physics department. I think a man by the name of Killinger has that room. The inside was just a large, square, empty room until this dome, as I say, which is made of sections of perforated aluminum that are rather light, were brought in the by the Spitz Company and bolted together and then pulled up on chains so they were up above the head level of people. Around the bottom of it, later, I had a series of aluminum boxes like this all around that were painted black. In these I could put these different projectors to show up on the dome from different sides. Now, one of our most successful programs, other than the Christmas star, was a program about Stonehenge. I met a man who had been there and he was very generous. He loaned me his slides. So, I got some copies of these slides made, and then I inked in the sky background and left only the stones. Then, I put those in a series of small projectors in this cove so that when this was turned on it looked like you were in Stonehenge, because here were the stones up [and] above were the stars. It looked like you were right in the standing circle of stones. That one was so well received we had to extend it, I think, for another month beyond the two month. There were so many schools that wanted to see that program. I can't particularly think right now of others, but there was a whole series. Except for the Christmas star, these others were all one-only events. When they were over we would change. Mrs. Hermson

would change the exhibit cases in the front hall so they displayed a support to some of the things we were doing in the planetarium.

G: Was there a charge for coming into the planetarium to see the show?

C: That was decided early that they were not going to do that. Probably, the reason was the required additional personnel. According to the state policy, if there are tickets there is one person who hands out the tickets, but a different person entirely takes up the money there of, and there is usually a third person who supervises the accounts. Since there was only one person, it was obvious not to bother, so they didn't. Maybe that's one of the reasons there were so many who came.

G: So basically, the planetarium was funded strictly from the university?

C: Yes.

G: In addition to these programs that you created, can you talk a little bit about the equipment, the telescopes, and things like that?

C: Well, of course in the planetarium one cannot use a telescope because it's a visual image. It's almost like being in a motion picture, you see. The other equipment, one of the things was a projection orary, which consists of an ingenious little device. It's a little cylinder about so big around, about this high. It's got little motors in it that run at different speeds, and there are little mirrors up on it that could be changed at different angles, and there are little color filters. Now, when this is turned on a light comes on in the center but light also comes up inside of each of these little rotating things, and this produces the image of a spot on the dome. It looks like you're off to the North Pole looking at the planets go around the sun in orbit. So, one could talk about the different planets, their properties, and how far from the sun they were and the rate at which they

traveled. These things could be done. There are some other simple projectors such as North, South, East, and West lights. In addition, one of the things that was mounted on the instrument was a very ingenious device. It was a projection of the moon. When this one was turned on the moon would go across the sky and it would go through its phases and it would keep turning upright because, as you know, the moon looks upright to us. Well, in a mirror image it would look like it's rolling. So no, they put a device in their that tipped it upright. So, the moon projector was a very special part of it. Then, on the planetarium projector itself are a series of mirrors. These are to position the planets against the sky for a particular date. Now, you could move them ahead in time altogether. That was one of the things that was featured in the program about the Christmas star, because one of the things that greatly puzzled people about the Christmas star in the first place was that the wise men said that they saw the star in the East. There is also a segment in scripture that says that they visited a place and they saw the star when they looked down into a well, which meant that it was reflected from the water, it had to be overhead. Then, the third time they had come to Palestine and asked where the child was born because they said they saw the star in the East. Now, if they had gone toward the East they would have drown in the Mediterranean Sea, if you would look at a map. They had to go to the West. That is precisely what happens over a period of time; because of the Earth's motion the sky all seems to rotate toward the West. Because the planets are at different distances from the Sun, what occurs on occasion is that some of the planets appear to go forward for a while and they seem to back up for a time, and then they go forward again. This is called retrograde motion. In the story of the Christmas star they didn't really know the difference between a star and a planet. All of those

things up there were stars, some brighter than others, but stars, you see. In the scripture it said that the star stood in one place, but when you read the semantics of the language it's impossible to tell whether they meant the star came together and stood in one place, or what. In the case of the retrograde that is precisely what occurs, and if this is timed out, as best we can tell with the trip that they took, the planets come together for a third conjunction over toward the West but a little to the South. Bethlehem is about six miles south of Jerusalem, so that is why the story seems to indicate that they visited with Herod, Herod sent them to look for the star, they went to Bethlehem. But, according to scripture, they were warned about Herod so they went home a different way and never saw them again. So, this all fit in. There are several other possibilities for a star that might have been a nova, which is an exploding star. The problem with the nova is that when we inspect the part of the sky where they apparently thought they saw the star, which is in the constellation Pisces, sign of the fish, sign of the Christian, there is no remaining evidence of a nova from that time period. So, we discount that possibility. Another [possibility] is [that it was] a comet, but from time in memorial people thought comets were the worst kind of bad luck you could ever imagine. It's unlikely that they would have taken the comet to be an agreeable omen. So it brings us back to the possibility of the retrograde or a miracle. We don't know. We can't prove it one way or another. That was where we left the program. We told them we've explained this, we've explained that, we explained the other; we have no other proofs to offer, so perhaps it was a miracle. We don't know. Well, that seemed to satisfy all manners of people who came, because it wasn't just Christians who came by a good bit. In fact I'm sure that there was one group of people who were really quite belligerent when they first came, but they left

feeling pacified. On that basis, we thought we were doing all right. However, time went along and time went along, and I began to get old and tired. I stayed with the planetarium for ten years past what would have been regular retirement time. I didn't retire until I was seventy. I kept hoping that they would get somebody else to take over the operation, but it didn't seem to occur and time went along and time went along. Then, there were indications that they might not. I thought well I can't stay forever, I have a few crosswords to do, other things that I want to do. So, I decided to retire and that's what I did in 1990.

G: When you retired was the idea that someone would take over the planetarium?

C: Well I hoped so, but there was no promise made to me on the part of the administration whatever. I wasn't sure what they intended to do. Well, when I did retire I stayed on teaching for a year or two because there was a class I had developed that seemed to be very popular among the students. It was about astronomy and so forth. So, I would come back part-time and teach that course for about an additional two years. In the interim it was decided that they were going to offer the planetarium to MOSI. Well at first I felt a little blue, but then I got to think now wait a minute, that museum is going to see far, far more young people than we did. Since they'd all be there anyway, that would be a good thing to do. So, I was not against that idea. Eventually, that's what they did decide to do, and that's where it is now.

G: Before we talk about your astronomy teaching, in terms of maintenance of the planetarium, can you go into a little bit about that? I would imagine that over the years the structure was going to need some structure and some repair.

C: Each year the Spitz Company had what they called a PMC (Preventative Maintenance

Contract) where in one or two of their skilled people would come in and they would go over the instrument entirely. They would clean up smoky star lamps, you know, and lenses, replace them if needed, dust things out, lubricate the planet units and the other parts, and reassemble it, test it to see, and we'd be all set for the next year. The person who was at charge at Spitz for most of the time was a very nice fellow by the name of Charlie Holmes. He supervised the PMC, and he came here many of the different years and helped with the work, other times there were other men who would sit in to do the work.

G: Now, the planetarium was constructed prior to the United States landing on the moon, correct?

C: Yes.

G: Were there astronomy classes that used the planetarium for course work?

C: Yeah, our astronomy classes would surely come to the planetarium and we would meet with the teacher of that class and ask what it was they wanted the students to get. If they wanted to talk they could and I would just run the instruments, and if they elected not to I would take their material and present it to the students.

G: Was the planetarium called the Planetarium, or was there an official name given to it?

C: Well, that was the official name I'm afraid, The USF Planetarium.

G: When you got this job to direct the planetarium you had mentioned that you were working sometimes well over seventy hours a week.

C: That was when I was in the planetarium. In order to change the programs, in order to develop the new programming, and you see I couldn't easily do that during the day time because I had these groups coming in. I gave as many as eight one-hour lectures per day.

On Sundays, for a good while there, we had three programs: one in the afternoon; one in the early evening; and one in the late evening, especially during Christmas season when we'd have three programs on Sundays. In other words, there was one day of the week that we refused to program if there was any way to avoid it, because we needed to do some other things. You have to go home and stuff. Well, that was Saturday. We elected very early in the game, we told people no Saturday programming. What we thought might happen is that in their enthusiasm might want to push their teachers into taking the students on Saturday, but that would make the teachers work an extra day of the week without pay and we weren't going to get anything more for doing it. So, we thought we'd do everybody a favor and there would be one day a week. That doesn't mean that I didn't come over on many a Saturday, especially during program time change in order to rearrange the other things.

G: Were you teaching astronomy in addition to running the planetarium?

C: I can't recall exactly. I don't think I had any formal class. All that happened is that the other teachers would bring their classes in and then I would teach them for that hour or so.

G: What I think I meant is were you instructing USF astronomy courses.

C: Yes.

G: Okay, let's talk a little bit about those courses. Certainly, I would assume that once we landed on the moon there became more of an interest for students to take astronomy courses.

C: Well yes, certainly that would have brought in additional interest. In other words, more students were taking astronomy courses. Unfortunately, for quite a while we did not have

an advanced degree program in astronomy. If a student wanted to be an astronomy major he could go to school here for four years, but then he would be forced to transfer to some other place such as Gainesville or Tallahassee or some other places. A lot of the student load went over to Orlando when they established their upper-division university. They only had two years, the upper two, so a number of our students went there. Eventually, we did have astronomy majors who continued. Perhaps one of the ones that I remember most was a young fellow by the name of George Gatewood. He was one of our early students and he became a student assistant and helped me with making devices in the planetarium. We made up murals with pictures in them. He did a lot of that handwork. Eventually, he became director, for a short time, for our observatory. Then, he left here and I think that he is yet, I'm not sure, I think he's now the director for the Allegheny Observatory. So, he turned out to be one of our star students.

G: USF had a planetarium and an observatory?

C: Oh yes, our observatory was located out in the golf course. Now, the telescope was one of the first major telescopes in Florida this far south in the United States. At that time, the chairman of the astronomy program was Dr**.** Eishorn. Well, Eishorn helped to instigate the construction of that telescope and they photographed portions of the sky that weren't easy to get to. In addition, they had a machine that was called a blink machine which compared the places of stars. Now, Eishorn's work was positional astronomy. What he was interested in is if a star was here today, where is it tomorrow. Over there? How far until over here? You see that, positional astronomy. Also, there was another astronomer who was involved in that work by the name of Dr. Robert Wilson who came with us there. He was involved in that. What happened is that the budgeting was

particularly low one year. As I say, USF often had to worry about that. Eishorn went up to Gainesville to meet with somebody up there to see what may be done about getting additional funding. It was suggested to him that he should join the physics department here. Well now it's past history known all over academia that any time an astronomy program is combined with a physics department usually it will radiate down to one, only, astronomer who teaches beginning courses. If the students want further, physics. So, he realized this was just going to throttle off his ambitions to have a Ph.D. program. Well, it so happened that about that time there was a new dean appointed up at Gainesville. Eishorn approached him on the idea of coming up there and bringing his whole astronomy department with him if they could remain a separate entity and not be forced to join with any other departments. Well now, the dean thought that was just perfectly all right, so that's what happened. Our astronomy department moved out lock stock and barrel, with the exception of the planetarium, and with the exception of one lady astronomer who is still here. Her name is Dr. Carol Williams. A very, very capable person, very astute. In fact she is the one, of all that we had, who was given permission to use the CERN computer up in Washington D.C. to do some of her work. Anyway, she was transferred into the math department because her astronomy work is mainly mathematics, so it worked out all right.

G: I've heard that Dr. Allen often went to the observatory at the golf course to look at the stars. Is that correct?

C: I think that is so, although you see, I was not in charge of the observatory. I'm convinced that he did on occasion when he could. Of course, a job like he had was pretty stringent. There were a lot of things I'm sure he would have liked to do that there was no time to

do.

G: Did he often visit the planetarium?

C: On occasion he would come over and visit. He would bring a group of distinguished people around now and then to visit and see what we were doing.

G: I have two more quick questions for you. What are you most proud about in your service to the University of South Florida, in your thirty years of history at the university?

C: Well, I think that I feel very fortunate in that I was able to develop such a successful program for the good of all people who were interested.

G: This is my final question, Mr. Carr, and this is something that I've asked all of my interviewees. If you could leave a statement to future colleagues and staff, or to previous colleagues and staff, what would you want to say about the University of South Florida?

C: Well, I would want to say that I believe that the University of South Florida, despite many, many set backs, has done an unbelievably successful job in bringing education to all incendiary.

G: Mr. Carr, thank you very much.

C: I hope I didn't say anything nasty about anybody.

End of Interview