

LD  
3745  
S67  
2007

# An Interview with Dr. Lonnie D. Spight

An Oral History Conducted by Dr. David Emerson

---

The UNLV @ Fifty Oral History Project

Oral History Research Center at UNLV

University Libraries

University of Nevada Las Vegas

2007

©UNLV@ *FIFTY* Oral History Project  
University of Nevada Las Vegas, 2007

Produced by:

The Oral History Research Center at UNLV – University Libraries

Project Director: Claytee D. White

Coordinator and Interviewer for Math and Sciences: Dr. David Emerson

Project Editor: Gloria Homol

Interviewers and Project Assistants: Suzanne Becker, Andres Moses, Laura Plowman,  
Emily Powers, Dr. Shirley Emerson, Mary K.  
Keiser, Lisa Gioia-Acres

Recorded interviews and transcripts composing the UNLV @ Fifty Oral History Project have been made possible through the generosity of CSUN (grant initiated, presented, and shepherded through the CSUN political process by Andres Moses) and the Libraries Advisory Board. Lied Library provided a wide variety of administrative services and the Special Collections Department, home of the Oral History Research Center, provided advice and archival expertise. The Oral History Research Center enabled students and staff to work together with campus community members to generate this selection of first-person narratives.

The transcripts received minimal editing. These measures include the elimination of fragments, false starts, and repetitions in order to enhance the reader's understanding of the material. All measures have been taken to preserve the style and language of the narrator.

The following interview is part of a series of interviews conducted under the auspices of the UNLV @ Fifty Oral History Project. Additional transcripts may be found under that series title.

Claytee D. White, Project Director  
Director, Oral History Research Center  
University of Nevada Las Vegas

## Table of Contents

|   |       |
|---|-------|
| Brief background; educated at Colorado State University and University of Nevada Reno; work experience with Department of Energy; job offer from Nevada Southern University 1970 when faculty member fell ill; mention of faculty members Harry Fector, Mau, Fronta Marchelia, and Maria Buchati Marchelia; description of physical appearance of campus; discussion of early instability in faculty numbers..... | 1-3   |
| Service as chair of department; main interest was to get research going, with support of Dr. Robert B. Smith; worked on solar energy, laser technology, and far-field microwave analysis; introducing quantum mechanics and nuclear physics.....  | 3-6   |
| Slow growth in faculty numbers; opinions on motivation of students then and now; looking at new chemistry building, early 70's, with Bob Smith; structure meant to be bomb shelter, but windows blown out by PEPCON explosion; arrival of Len Zane; reasons for high turnover of physics teachers; finding money for research.....  | 6-9   |
| Discussion on faculty governance; recalling the merits of the "good old days"; serving 12 years as volunteer disc jockey for KNPR; further discussion on state of cultural amenities in Las Vegas; controversy over health issues related to transmitter on roof; anecdote about Jeff Dundan.....   | 9-13  |
| Created first connection to mainframe computer in Reno, early 70's; Dr. Emerson gives background on reasons for removal of radio transmitter to Black Mountain; currently teaching courses in quantum mechanics; ready to teach particle physics; short discourse on advising students; 37 years at UNLV, ready for many more.....  | 13-16 |

## Preface

Dr. Lonnie D. Spight grew up in northern Colorado, earned his bachelor's degree at Colorado State University, and his PhD at University of Nevada Reno. His interest in astronomy dates from his early years on the farm in Colorado, star-gazing in the fields at night.

Before coming to UNLV, Lonnie worked for the Department of Defense on scattering cross sections and explosions. Working between Los Alamos and the Test Site, he was often in Las Vegas and had met most of the physicists at the university. He was invited midterm to take over a physics class for a faculty member who had fallen ill, and was offered a job the following fall of 1970.

In the seventies when Dr. Spight arrived, the physics department was located in trailers, and the university campus was mostly desert. Lonnie served as chair of the department on several occasions, and was responsible for insisting that faculty members get involved in research, no matter how tight the budget. He worked on solar energy and far-field microwave analysis, and helped set up safety standards for the new laser technology.

One of Dr. Spight's interests outside of physics is a love for classical music. He was a volunteer "Deejay" for 12 years with KNPR once it got started in 1980. Meanwhile, after 37 years with UNLV Lonnie retains his enthusiasm and love for teaching. Today he teaches quantum mechanics and hopes that one day he will be able to teach a particle physics course which ties together cosmology, the beginning of the universe, fundamental cutting edge physics, quarks, gluon plasmas, and more. He has the course materials ready to go and is looking forward to many more years at UNLV.

ORAL HISTORY RESEARCH CENTER AT UNLV

UNLV Oral History Project @ Fifty



Use Agreement

Name of Narrator: LONNIE D SPIGHT

Name of Interviewer: DAVID W. EMERSON

We, the above named, give to the Oral History Research Center of UNLV, the recorded interview(s) initiated on MAY 8, 2007 as an unrestricted gift, to be used for such scholarly and educational purposes as shall be determined, and transfer to the University of Nevada Las Vegas, legal title and all literary property rights including copyright. This gift does not preclude the right of the interviewer, as a representative of UNLV, to use the recordings and related materials for scholarly pursuits. There will be no compensation for any interviews.

Lonnie D. Spight 5/8/07  
Signature of Narrator Date

David W. Emerson 5/8/07  
Signature of Interviewer Date

**This is David Emerson. And it is my privilege today to interview Lonnie D. Spight. He's in the physics department and is the most senior member at this point I think. Is that right?**

Yes. Except now it has become the physics and astronomy department, which is something we've been working towards for 30 years.

**You finally got there, huh?**

Finally got there.

**Well, it has been that for some little time. It takes a while to change a name in the university.**

**Would you like to tell us a little bit about where you grew up and where you went to college and university and so on? How did you get to be a physicist, in other words?**

Oh my, I wonder about that myself sometimes. I grew up in Northern Colorado. I went to Colorado State University and then to Reno and then to here. I often ask people how did they become interested in physics or astronomy? Usually it happens long before they have any memory of it. I grew up on a farm. I used to go down in the field and sleep all night and look at the stars, among my earliest memories. I had no idea what they were all about, but they were fascinating. I think that's the cause.

**Right. I too grew up on a farm and I used to sit around on the lawn sometimes.**

You know what that's like.

**Oh, yeah. It's great fun.**

**So you got your bachelor degree at Colorado State and then your Ph.D. at Reno?**

I got it at Colorado State. It was just three blocks down from where we lived. I got a master's in philosophy of science and then went to work for a few years and then came back and was working with a professor at the University of Colorado who went to Reno to get a divorce and decided to stay. So I followed him and then finished up there.

**After that what was your first major professional job?**

Do you mean before starting here?

Yes.

Some work for the government on scattering cross sections and explosions. It's the same sort of process that occurs in stars. My interest was exploding stars. But it's the same thing that happens

in nuclear explosions.

**So this was presumably the Department of Energy or Defense?**

Department of Defense at that time. Department of Energy was the name given to that. You know how the government renames things, breaks them apart. So the Department of Energy came later.

**Did you work directly for them or was it a contract to DRI?**

Directly.

**How did you end up coming to UNLV?**

Oh, my, that's one of those accidents. I was doing some work between Los Alamos and the test site and coming into town a lot. So I had an apartment I was renting. I had met most of the physicists here already. One day I got a call from the chair of the department saying that one of the faculty -- it was mid-semester -- was very ill, very, very ill, terminally ill and he couldn't go on and asked if I would take over the class. So I took the class from mid-semester until the end of that semester. Then that next fall they offered me a job.

**And who was in the department at that time?**

Oh, let's see now if I can remember. Harry Fector was the chair of the department. We had a theoretician, Mau. I can't remember what his first name was, but Mau. I keep wanting to say (indiscernible), but that's the wrong Mau. We had Fronta Marchelia from Yugoslavian and Maria Marchelia. Maria Buchati was her maiden name, which was an Asian name. And who else was there? There was at least one other person I'm trying to remember and I can't remember anybody else. But there were about six people altogether.

**And what year was this, then?**

In 1970.

**It wasn't even UNLV at that time, was it?**

No. That came quite a bit later. Before I came onboard it had been called the Southern Nevada extension service from Reno. Then there were so many different names. I don't even remember what it was called. But UNLV came along as the name much later.

**I think it was known as Nevada Southern College at one time.**

Yeah. University of Nevada Southern Division or something of that sort.



**So where was the physics department physically located then?**

In trailers where the old -- let's see. You know where the geoscience building is? Right there to the east of it was desert and there were a bunch of trailers. That was where the physics department was. The dean was in the geoscience building. And all physics faculty and some of the other faculty were in the trailers, one on one.

**Moving on from that point, you mentioned that a faculty member had died. Were there other departures that occurred not too long afterwards?**

Yes. There were some people that were being denied tenure and they moved on and were replaced by others. Then, of course, we had at that time to hire replacements for those people. It was very hard to get people to come to Las Vegas at that time. So we had a few people who came and did not stay long by their own choice. Eventually, it became stable after a number of years.

**How long would you say that was?**

Six to eight years it took before we started becoming stable.

**So this would have been up to about 1978?**

'78 or '80, somewhere around then where we were able to retain people.

**Was Harry Fector around all this time?**

No. He was one of the ones that -- how do I say this politically? -- needed to leave.

**Yeah, I've heard various stories about that. A very brilliant person apparently who had some difficulties, perhaps, in getting along with people.**

The less said about that the better I think.

**Were you at anytime the chair of the physics department?**

Oh, several times. Yes.

**When was the first time?**

This is a guess it's so long ago. '72 or '73, somewhere around there the first time. And then for -- well, this is so long ago I don't remember the exact number of years. And then Len Zane became chair for a couple of years. Our first astronomer had been hired by that time. This is in the late 70s. He was the chair. And then I was the chair again for about four years or something like that. So, yes.

**It was not a position that was highly attractive in those days I gather.**

It isn't entirely attractive today. I think you have to be born into a state of mind that you can deal effectively and happily with the job that the chairman has.

**It's interesting. When I first got here in 1981, there was a workshop for department chairs. People that designed the program, the American Council for Education or some such thing. So Dr. Dale Nietschke, who was the academic VP at that time, asked the deans to go to this reading, which was down at Lake Havasu City. And he didn't give us any special assignment. So I just joined one of the groups. One of the first things we started talking about is how did we become a chair? And to a person -- this was both male and female chairs that were in our group -- it was because the alternative was too awful to contemplate. Yes. That's it.**

**If you get my drift.**

Some problem that was so pressing and wasn't being taken care of and was going to be interfering with what you really wanted to do. Yeah, I think I would agree with that.

**And I guess at that time there was no financial advantage to being a chair, was there?**

No. You were just a regular faculty member that tried to carry on as a faculty member while trying to cure some of the problems.

**What were some of your adventures at that time?**

Trying to get research going. I think I created a Frankenstein monster in some sense. But when I arrived here it was understood that no research was to be done. There was no money for it, a lot of disincentives. One of the first things I did when I became chair was insist that you can't be a physicist without doing at least some research. That's the only thing that keeps you alive. It may be very low-level given that you have no finances or anything, but you've got to do something. Otherwise, you go crazy. So that was the major challenge to begin with, one of the things that I had to change. And that involved some of the reasons for people moving on.

**And where was the pressure for this coming from?**

Me, with the full support of the dean.

**And the dean at that time was Bob Smith (*Editor's note: Dr. Robert B. Smith*)?**

Bob Smith. He understood that -- well, I think he had a far greater vision than I did. All I knew was that you couldn't work as a physicist unless you did some sort of research. I think he probably

saw a much longer line of development than I did. So with his consent and encouragement we started what today would be minor bits of research. But it got started. It was a beginning.

**And what were some of the kinds of projects people were working on?**

Maria Buchati was a very good solid state physicist. She finally got investigating some small areas of research. We didn't have enough money to do much of anything. We started doing some solar energy monitoring. As you are well aware, solar energy as a major source of energy has been considered many times cyclically. At that time people were particularly interested in trying to tap into the solar energy. It died out a few years later and then it was reborn. And now it's being reborn once again. So we were able to buy some instruments to make some measurements there and make some correlations with various different things. Anything we could do just to get started.

**What kind of things did you work on?**

Some solar energy stuff. I was still doing some stuff with what by that time had become the Radiation Health Safety Department in our building, Public Health now. I was working on some far-field microwave analysis. Lasers were fairly new objects at that time, new inventions. We were setting up some safety standards for lasers, biological limits, damage and a little bit of nuclear physics. And teaching a lot.

**Oh, yes. What was the teaching load in those days?**

Courses a semester, four. Those were the very earliest days.

**And what did you have in the way of students? Both engineers and chemists have to take physics. And so do the biology majors.**

The physics curriculum has changed very little over the years except for the graduate program. We didn't have much in the way of a graduate program. That was just in the development stage. That was made in stages back then. Engineers and physics majors took our three-semester general calculus and physics introductory courses. At that earliest time we didn't have the non-calculus courses. But that came along when the need for it came along. Biology was a small field-oriented area at that time. So the occasional biologist would take the physics and calculus level, very occasionally. So those developed later.

The rest of our curriculum -- as you might well appreciate physics has been a pretty stable

undergraduate curriculum for the last 50 years. We did a few novel things fairly early like introducing an undergraduate quantum mechanics course. Schools had been doing that all over the country, but they hadn't had one here. A nuclear physics course. The E&M and optics and mechanics, those are all standard courses anywhere and those had already been established.

**Now, how many faculty members were there to teach all these different subjects?**

I can't remember the exact number. Six to eight. We were slowly, very slowly growing. So, essentially, in the 37 years that we've been here, we've doubled the number of faculty.

**And at that time how prepared were students that were taking physics courses, particularly -- well, you mentioned it was later on when the non-calculus courses came in.**

**But how well prepared were they to tackle courses like that?**

I don't think they were any better prepared coming out of high school. But the students' motivation seemed to be greater than it is now days.

**I'm hearing that a lot, actually.**

Well, I think it has a lot to do with the way our society has evolved. I'm quite sure the students today are just as intelligent as they ever have been. But they have less motivation and less built-in rewards. So I've noticed that -- this may be just an old man talking. You always say that things are going to pop. But I think that the reward structure for a student is very different now than what it was. So we had more serious students back then.

**At what stage did you move into what is now called the chemistry building?**

I don't know the exact year, but it was fairly early. You would know when the chemistry building was built.

**I think it came on stream in 1970. I think that's the date they assigned to it.**

In 1970?

**I think so.**

No. It was being built while I was still here. So it was the early 70s, but it couldn't have been in 1970. That was the year I came. And I remember Bob and I going over for -- we were supposed to -- rummaging around to see what it was like. Early 70s, but not 1970.

**And Bob would be Bob Smith?**

Bob Smith, yeah.

**So at some stage somebody made a decision to put chemistry and physics in the same building?**

Well, initially math, physics and chemistry -- all three were in the building.

**It must have been very cozy.**

From the word go we were crowded.

**Supposedly that building is also a bomb shelter, capable of holding 1900 people as I understand it.**

Yeah. And we were each assigned to be the marshals for a certain floor, the food rations and everything. The irony, of course, is when the titanium plant blew up in Henderson, it blew out many of the windows -- or at least a few of the windows in the chemistry building. So one wonders how good a shelter it would have been.

**That was PEPCON, the ammonium perchlorate factory. Right.**

**When did Len Zane come on and what were the circumstances?**

We had a faculty member who was married to another faculty member. One was eminently tenurable. The other was eminently not tenurable. When notified that they had only one more year, they waited until the very last day classes began to tell us that they would not be here. In the meantime I had contacted one of my colleagues in Colorado to find out if there was somebody that they could recommend that at the very last moment could come. That was Len Zane.

**Do you remember what year that was?**

I don't. It was early in the 70s, somewhere in the first half of the 70s.

**So there actually was somebody available, then, to teach some courses.**

And he understood that we could only offer him at that time the last-minute notice and offer him only one year. But that was agreeable to him.

**As I recall the early 70s was a really bad time for physicists to find jobs.**

Yeah. There were a lot of physicists who were in the pipeline because the Russians had beaten us into space. And the government was pumping a lot of money into it. But most of the physicists were still in the pipeline at that time. We had our adventures there, people who probably should not have been in the pipeline but did get Ph.D.s in physics. And we hired a few of them on various different occasions only to find out that they were either not interested or not adequately

prepared. And they were encouraged to move on. This created a great deal of turmoil. I shouldn't use the word turmoil. Turnover. There was some turmoil, but mostly turnover.

**I remember back then. I was in Michigan at that time. They had two physics positions open and had advertised for them. I think we got 360 candidates for the two jobs.**

That would have been typical. I think we were having on the order of a hundred, 150 applicants for some of our positions.

**How was the screening done at that point?**

We were mostly trying to represent at least in a modest way the various different areas of physics instead of trying to concentrate on one particular specialty in physics since primarily we're a teaching institution. We were looking for somebody who could pretty much function as a good teacher and carry on some sort of a collaborative effort with whatever group they came from. So we were trying to establish some connections with the outside world for our research.

**I remember something that was present in 1981 when I came and for a while after -- a Visibility Research Center in the physics --**

Not in the physics department. There was a Visibility Research Center mostly associated with the Environmental Protection Agency, wasn't it?

**I remember that somehow some of their overhead money and so on got to the physics department.**

I don't remember Visibility Research.

**It was a grant program of some sort. That's my recollection.**

My memory is blank on that.

**You mentioned a number of fairly small research projects that got started. There wasn't major money available, but there was some money. Where did that come from?**

There was no grant money we had. Initially, it was just money secreted out of the departmental budget with a little bit of augmentation from the dean that he could afford to encourage us with. Eventually, people started writing small grants. We were turned down a lot. Eventually, that all led to -- EPSCoR became a program with the government and Nevada became part of that program and still is. A long, long slow growth project; getting grant funds.

**I recall the idea of startup money was a foreign concept to the upper administration.**

One of those things that Dr. Kwong every once in a while brings up is he had apparently made -- Ed Grayzak had been chair when they recruited Kwong. He had been a post-doc at Harvard. And they had made some sort of an agreement that Kwong would have a thousand dollars startup money. That was big for us. But it had been made by the chair at the time that he was being recruited. Following that, in the fall, I was the chair again. And I remember the first thing Kwong did was come in and say, "Where's my thousand dollars?" And my response was, "What thousand dollars? We don't have a thousand dollars." So he had been promised that as his start. That was the level of startup money we had at that time. It has grown since then, along with faculty salaries.

**What was faculty governance like in those days?**

Within the department?

**Yeah, in the department and then on a larger scale.**

Within the department at various different times it switched from being primarily the chair governing the department to the department as a whole being the governing body, depending on the mix of people. At that time I think there was far more faculty governance than there is now days. We had a much smaller administrative structure for the university.

**It's pretty large now, isn't it?**

It is. I believe the typical nature of administrative view is to become bureaucratic and grow and grow and grow until finally they fall off. It had very few administrators comparatively speaking. And anybody who was here at UNLV at that time -- it wasn't UNLV at that time -- but everybody was here because they sincerely wanted to be I think. So they were much more involved in creating something. The administration from the dean on up -- well, actually from the chair on up -- was much more amenable to new and novel approaches towards things. It was a matter of survival I think. We were trying to figure out how to do what we needed to do with very few resources. And that doesn't seem to be as possible today as it used to be.

**Yeah. I know what you mean.**

I may just be old and cranky. I don't know. But it seems like it's harder to be innovative now.

**I suppose part of it is size.**

Definitely.

**There seems to be this mind-set in America that bigger is better. And that in my mind ain't necessarily so.**

Nature has tried his hand --

**(End Tape 1, Side A.)**

**In other words, the bad old days are not necessarily the good old days.**

Well, I think the bad old days were not as bad as most people think. Some people try to paint the history of the university as if it were really bad back then. It was not bad. In some respects I think it was a lot better than it is now. Most of those respects have to do with the inevitable growth of the university.

But in terms of what was valued back then, I think we had a clearer picture. We initially didn't value research enough. But that wasn't because it wasn't valued in and of itself but because we didn't have the resources for research and the enthusiasm of the faculty in virtually every department that I had anything to do with -- the willingness to participate in all aspects, the teaching, the self-governance and the service.

At that time the community also had much more enthusiastic support for the university. It was their own local university. They never had one before. Now, of course, I think the administration has to go to great measures to cultivate the support of the community. We didn't have a great big basketball team at that time, either.

**Well, you mentioned being chair several different times and so on. How were chairs selected or were they selected in the department? Was it done at a different level?**

It depended, once again, on the unique circumstances that were prevalent at that one given time. They were either democratically elected or appointed by the dean. Most of the time it was the consent of the -- we chose our own chair most of the time, not always, but most of the time.

**I'd really kind of be interested in knowing how you decided on the procedures because I found to my considerable surprise that physics was the only department that did not have any bylaws. That was certainly true up until the early-middle 80s I think. There were no bylaws in the physics department. So the college evidently didn't put any pressure on physics to do that or what?**

In some sense we didn't want any bylaws. I don't think any of us realized that we didn't even have



any bylaws. We just went ahead and either selected a chairman or accepted the one that was appointed. Physicists are in my opinion a bit different from most of the societies of the world.

**Oh, I would agree.**

They tend not to notice anything outside of their own particular special interests, physics. So as long as things are working reasonably well, they don't concern themselves too much with the legalities. And in retrospect I suppose it's because we never did have any real need for bylaws. It never occurred to anybody. We didn't have any. We just solved problems and tried to cure them.

**There's something to be said for that method.**

It got us eventually out of all of our problems -- well, not all of them, but major ones.

**You speak of physicists being sort of focused on one little thing. But I seem to remember when with delight I discovered that there was a public radio station here, KNPR. And the disc jockey, if I may use the term, for classical music was somebody named Lon Spight.**

That had nothing to do with the physics department, though.

**I know. But it indicates an interest outside of physics.**

The radio station started in 1980. For several years previous to that I and a group of other people had tried to get radio time, buy radio time, for the classical music programming. There was none available. Nobody would sell us time. So, finally, with Lamar Arcazi, who was very knowledgeable about -- you know Lamar, don't you?

**I don't know him personally, but I know of him --**

He was associated with the library, the Clark County Library District. He somehow managed to get some grants to lobby the appropriate people to license and hire an initial staff of about four or five people and an engineer. As I was interested in classical music, I got involved. It was at that time an all-volunteer situation where you had a professional manager—Lamar -- a professional programming director and professional engineer and everybody else was a volunteer. So that's how I got involved in that, 12 years.

**Well, it seems to me physics was considerably involved. Was Len Zane on the board of directors?**

I believe he was at one time.

**Adelle Smith, Bob's wife, was very heavily involved in it.**

Oh, yeah. Adelle was very much involved.

**That was one of the very pleasant surprises about coming here. There was some cultural activity that one especially at that time didn't necessarily associate with Las Vegas.**

Well, that's probably why a few extremists got it going because it wasn't associated with Las Vegas. Once we were on the air it was obvious that there was a large segment of the population that loved it.

**It's certainly one of the amenities for any area to have. And it's wonderful the way they have reached out to other sort of isolated communities to offer the service and so on.**

Now, of course, it's been on the air and so many people have come to the valley since then that it's just taken for granted. Back in those days nothing could be taken for granted.

**Absolutely not.**

Those were the bad old days in terms of who was in the control of the casinos. It was starting to die out at that time. But we had in town a lot of people who had come to the desert without any expectation of there being any culture. And when the university started getting performers coming in from outside, it was the cultural center of the entire city for quite some time.

And the radio station -- well, here's an interesting thing. At just about the time that the public radio station was being put together, the original proposition was that it be, as most public radio stations, associated with the university. The student population, however, the student body representatives were quite adamant that they didn't want that to happen. They wanted their own radio station. So that's why they wound up with one station and we have an unassociated public radio station, which is an anomaly in this country. Most public radio stations are associated with... Well, eventually after quite a few years the jazz portion of the public radio station was taken over by the university people. And that went on for a while. I guess it still is going on to some degree.

**KUNLV, isn't that right?**

Yeah.

**I seem to remember something about the physics department and the transmitter that was on top of the Flora Dungan Humanities Building.**

Yeah. There was some question at that time whether the radiation emitted by antennas was capable of inducing cancer. You might recall the same controversy about high-voltage electrical

transmission. At that time there were a lot of people reporting data that it did have a relationship and other people reporting that it did not. They had the transmitter for the university radio station on the roof of the building and the president of the university was on the top floor. They removed it shortly after.

**Well, there's more to that story.**

That's all I know about it, though.

**You remember Jeff Dundan? I guess he was doing nuclear magnetic resonance?**

Squid measurements, yeah. He is an example of a person who was really good, came here for a while, and decided he didn't want to pursue physics anymore. So he just dropped out of physics.

**Have you ever heard from him since?**

I've never seen him since then. But about a year ago early in the morning -- and my classes are in the early morning -- I was walking down the hall. There was a small pile of books sitting on the table in the hall, Jeff Dundan's books. Apparently somebody, presumably he, had come through and left some of those books there rather than -- I don't know. It was much too mysterious to say that they just popped out of a black hole or something.

**Well, that was kind of interesting. May I relate a small story that, perhaps, you haven't heard before? You remember Dave Bond who used to be the electronics technician for the college? Well, at that time most of the computing was done on a large machine and we had a bunch of dumb terminals that you could communicate with --**

I'm the person that made the first connection to a computer from UNLV.

**Really? What year was that?**

I needed a mainframe computer to do my research. There were no mainframe computers within 500 miles. The physics department bought a Teletype. I connected it up to the Reno computer, the first computer on campus. It was the very early 70s.

**Well, this was the early 80s. And Dave Bond came in one day. They had set up a terminal room on the second floor of the geoscience building in the south end. And he said, "I'm puzzled." He said, "They keep reporting that the terminals don't work and I bring them into my shop and I check them out and they're perfectly all right. I go up there and plug them in and they don't work."**

I had heard something like maybe it was from Jeff that he was unable to do any experiments anymore because the RF energy was messing up his experiments. So I said to Dave, "Let's take a walk up there and take a look." So he and I went to the terminal room. And I looked out the window and it was in direct line of sight with the transmitter.

About that time Don Baepler had gotten this state of the art (umbilical) chemistry operation going in the museum that is now the Harry Reid Center. EPA had funded it. EPA was asked to send one of their executives to be present at the dedication. So they sent the notorious Rita Labelle, who later served some time in prison. So in the corner of the museum that was on the south end of it they were going to have the ceremony. They set up a microphone with a long cord on it so she could stand up there and talk to the crowd and have her voice amplified. When she got up there to switch it on, (snap), rock and roll. These are things I never heard about before. So there was much more to this than I thought. And there was a guy at that time in the EPA who had an instrument with which he could measure RF energy at various places around the campus. So we asked him to do a survey of it. It was very strong everywhere, just about everywhere on campus.

I know Jeff Dundan had trouble with it.

Oh, yes. And I had asked the president to see about removing the transmitter. I guess the event with Rita Labelle finally emphasized the urgency of this particular course of action. But the thing that really held it up was the Federal Communications Commission because they have to authorize sites and it takes a long time for the wheels in government to roll and approve a change of location for that. But it finally got moved up to Black Mountain, didn't it?

Yes. Up where all the others are.

And that solved the problem on campus.

Yeah. That involved a lot more than --

That was a fascinating episode. And it drove off one of our physicists. I mean he might have continued if --

You know, I've often wondered because knowing Jeff, the kind of personality he had, I don't think that that was -- I think that was just the final straw.

**And the airplane that he was building was approaching completion and so forth.**

But he vanished as far as my world is concerned. That's why it was so surprising to find his books out there with his name in them. So I think that was a life choice on his part.

**Could well be.**

**What courses do you teach now days? What are your favorite subjects to teach in physics?**

Quantum mechanics. Of course, my favorite subject is particle physics. But we don't have enough faculty to teach all the courses. So some day one of these things that I hope does happen is that one of my classes won't have enough enrollment to go and I'll be able to teach the particle physics course, which is all ready to go. It ties together cosmology, the beginning of the universe, fundamental cutting edge physics and quarks and gluon plasmas and so forth. It's something that none of our students get except maybe they've seen something on television about it. So it's a conspicuous absence in their education.

**And do you do any advising of students these days?**

Oh, yes.

**Could you talk about that a little bit? What do they come in to see you about?**

Well, yesterday, for example, one of the students who is graduating this year and will be continuing on was coming in to ask about what courses he should sign up for in his first semester of graduate school and how he should do this instead of that and what he might expect. I do informal advising to all the students in my regular classes that will listen. Part of being a graduate coordinator is telling the graduate students what they need to do. Whether they want to do it or not, they need to do it.

So, yeah, I do a lot of -- now, those incoming freshmen that are assigned to various students, they never come around. Those are the ones that probably could benefit from some advice.

But I do a lot of very informal advising, not just about classes and schools, but what is physics like and why bother pursuing it? Encouraging students when they're down. Kicking them in their rears when they need it. So I guess I'm at that age where I give too much advice. But I always preface it by saying you can ignore everything I say, but...

**Now, 37 years. As you look back over these 37 years, do you have any regrets about the choices that you made to come here, for example?**

Not really. I've been able to do almost nothing but what I would like to do.

**Well, that's great. That's one of life's blessings.**

You buy that at a small price. But there are certain things I haven't had or done, but I wouldn't do anything differently.

**It's great to be able to say that. Not too many people have the luxury of looking back and not having very many regrets because of their choices and so forth.**

I can identify what it costs and I say to myself, well, it was worth it. And I think I'm more enthusiastic about teaching today than I've ever been before. I hate to see summer come because it ends the period in which I can see people learning things.

**Physics doesn't offer much in the way of coursework in the summer, does it?**

No.

**Why is that? Nobody wants to do it?**

They're all doing research mostly. And undergraduates -- there just isn't enough demand. There is at the very beginning level physics, the 150 series. But upper division, no, there aren't enough students to warrant it. So they instead get involved with research projects down in the laboratories that often come up during the summer. It's all very informal stuff. They come in. I throw problems at them. They do it or don't do it, knowing that there's no threat.

**Well, is there anything you would like to say as sort of a final benediction on this interview?**

Yeah. Come back in ten years and interview me again. I'll still be here.

**Okay. If I'm still here, I might do that.**

We'll both be here. Okay? We'll agree on that.

**All right. Thanks very much.**

**(End Tape 1, Side B.)**