YOUNGSTOWN STATE UNIVERSITY

ORAL HISTORY PROGRAM

Erie Railroad Project

Railroading Experiences

O. H. 780

ALLEN ANSELL

Interviewed

by

Jerome Mullen

on

December 11, 1975

YOUNGSTOWN STATE UNIVERSITY

ORAL HISTORY PROGRAM

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INTERVIEWEE: ALLEN ANSELL

INTERVIEWER: Jerome Mullen

SUBJECT: signal systems, maintenance,

- DATE: December 11, 1975
- M: This is an interview with Mr. Allen Ansell for the Youngstown State University Oral History Program on the history of the Erie Railroad, by Jerry Mullen at Mr. Ansell's home in Vienna, Ohio at the Four Seasons Mobile Home Park on December 11, 1975, at approximately 2:00 p.m.

Just to get a background of your family life and things like that, tell me about your family, your parents and then your family.

- A: My dad is 81 years old. He is still real active; he golfs and bowls. My mother has been dead since 1948. The old man was a frustrated railroader. That's just what it was. He worked on the railroad in 1918, 1919. Then they had a strike in 1920 and he went out on strike and never went back. I think you will find this out too, you can take a man off the railroad but you can't take the railroad out of the man. He still is a frustrated railroader. He gets a big charge out of anything to do with the railroad. He will stop and look and he really enjoys it.
- M: How did he get started in railroading?
- A: He came from England and worked the lake boats. He drifted down inland, you might say, and that was the job that he got into. He had fired on the lake boats and he just went firing on the B&O 8. When they went on strike, he was a young fellow and he never went back.
- M: So he must have started before the turn of the century then?
- A: He started right after World War I, in 1918. I think he worked until 1920. They went on strike in April of 1920 because that's when I was born; they went on strike right after I was born.

He never went back.

- M: What did he end up in?
- A: He ended up in the mill. He was a carpenter and a stationary engineer for years and years and years. Then he retired and now he is a golfer and a bowler.
- M: Do you have any brothers and sisters?
- A: I have two sisters. The oldest one has two girls and her husband is in construction. The youngest one has three boys and she is divorced. She's raising them.
- M: How about yourself?
- A: Mom and I have been married since 1947 and we have two girls. They are both married and they each have two kids. The oldest one has two boys and the youngest one has a boy and a girl, so we have four grandchildren. Mom works at Packard; I worked on the railroad.
- M: How about your school days. Where did you spend them?
- A: We lived in Brownley Woods on Neilson Avenue. I went to Jackson Grade School. I went to Wilson when it was just a junior high school. I went there for junior high. I went to South Parma High School. In the meantime, they made Wilson a high school. I graduated from Wilson. I was the third one in the first graduating class that they had at Wilson. We went alphabetical; it wasn't scholastic. That was the extent of my education.
- M: What year did you graduate?
- A: 1939.
- M: What did you get into then?
- A: Well, in 1939, the Depression was just over and jobs were at a premium. I fooled around for about two years trying to get a job and I finally ended up on the railroad. I worked on the railroad from 1941 until 1973. That's the only job I ever had.
- M: Was the fact that your father worked on the railroad a motivating factor in your going to work in the railroad?
- A: No. My motivating factor and my working on the railroad was it was the only job I could get. I weigh 160 pounds now, but then I weighed 120. They had a choice of men, everybody. I took the first job that I could get and that's the one that I stayed with. I've never been sorry because I never missed a paycheck on the railroad. It was good to me. Of course, they

received their services, but it was still good to me. This thing that is happening now with B&O and C&O taking over, it just kind of upsets me because there are too many men that I am afraid are going to lose out on it.

- M: Once the railroading got into your blood, what is there special about it? I think you said that it was more than a job.
- A: I don't know. The thing is that any job is not a job if you like what you are doing. I liked railroad; we worked hard and did a lot of dirty work, but it was good. It was something different everyday. There wasn't much monotony to it. Another thing I liked was that I was pretty much my own boss. I had supervision but I laid out my own work; I did my own work.
- M: Which department did you start in?
- A: Signal department.
- M: And you stayed in that until you retired?
- A: Yes.
- M: What kind of early training did you get? Was there special training when you started?
- A: No. You worked and picked the stuff up as you went along; you had to learn it yourself.
- M: You mean the other men just taught you what was involved in it?
- A: Yes. You learned from doing. You did certain jobs. Surprisingly enough, there are things to learn about pick shoveling work.
- M: What signal system was in use when you started? Was it the present system that they are using now?
- A: No. We had all style S signals; S is the type of signal. Now they got all colored lights which actually there is less maintenance to them, less things can go wrong with them outside of vandalism. This new system is much better.
- M: Even before they had the style S system in, what did they have? Do you know?
- A: That was beyond my time. I worked in the Niles territory for ten years and they just got rid of the last style S signals last summer. So this is just a gradual change over the years.
- M: I suppose there was a time when they had no signals at all. Do you know how they operated then?
- A: They must have operated on train orders. Well, I'll tell you,

interlocking plants starting from the westend tower . . .

- M: Cleveland?
- A: Yes.
- M: In the interlocking plant there is a man there to throw the switches?
- A: They operated them just like DeForest or SN; those were interlocking plants.
- M: He acts like a traffic light?
- A: Yes. He controlled everything there. Through Girard there must have been towers just about every couple of miles because that was their system of railroading. When I came out--I would have to venture a guess--but I know we took out a lot of interlocking plants.
- M: And replaced them with the signal system?
- A: Yes. Some of them we made electric and controlled them from some place else. Some of them they just eliminated. You got places like state line. Those were interlocking plants but they are operated by anybody now. But way back, way before my time, those would have a man, a three shift operation there. They had a lot of operators.
- M: So the new signal system was responsible for . . .
- A: It was responsible for elimination just like your flashers, and your gates; it eliminated crossing watchmen.
- M: What was the style S system like? How did it operate and what was involved in the signal system?
- A: It just made for safer train operations.
- M: Let's start with an individual one signal, what did that look like and how did it operate?
- A: With the yellow blade and the red, yellow and green roundels positioned for the yellow blade. The horizontal was a red position and at a 45° angle that was an approach yellow and a 90° was a green. The signal assumed those positions.
- M: It was a pole and on the pole you have these three roundels and they assumed different positions depending on which indication you wanted . . .
- A: This was all automatic. The trains controlled the indication. The train on the immediate block ahead of that signal, that signal

was in a horizontal or red position. After he passed, the signal in advance of that, this signal that we are talking about, assumed a 45° or a yellow indication.

- M: You have position A, and signal B, and position C. You are saying it in that order. You are saying, when train A passes signal B into position C and then the signal B behind the train drops to a 45°...
- A: No, it's red.
- M: It drops red so it would be horizontal?
- A: Yes.
- M: Where did the power come from? What was the energy source that would operate these signals?
- A: We had what we called primary batteries. They tell me about batteries before my time, but all I ever . . . We've had the Edison primary battery, there was a soda in a can that you poured in a jar, poured water in, mixed it, and that dissolved your chemical. Then you had two lead plates and a carbon center, copper carbon, and the chemical action produced the power. Each cell would produce about half a volt. When I first started, they were using sixteen cells and then they went to eighteen and then they went to twenty for signal power. That gave them about ten volts. It was all oval inch. Now they are operating off of six storage batteries.
- M: You mean like a car battery?
- A: Yes, like a car battery, wet cell. They are operating off of six of them. The present batteries are good for . . . I don't know . I've seen some that had been in service for thirty years. The old primary batteries were good for, depending on how much use the signal got, maybe six months to eight months. They were kept in what we called a well. It was six foot deep, concrete, and sunk in the ground. We would get down there and hand them out. After we got them all out, we would build them, put them back in and they were good for another six or eight months. I don't know if this is going to make sense to people or not.
- M: This old style S signal system now, they had no color indications on the signal itself?
- A: Oh, yes. Red, yellow and green roundels. Your roundels were colored. They also had a blade indication. You had the color indication with your roundels.
- M: Would they light up when a train approached?

- A: Back in the old days, when I first started, it was all kerosene lights. Every week we had to go around and fill those, clean the wick, clean the chimney, and light them. That provided your white light and your color lenses gave the color indication then. Those were all oil lights.
- M: When the arms dropped down I take it that the color light would be revealed?
- A: Yes.
- M: If the arms were in a position where they were not giving any indication at all, did they cover the light?
- A: They covered the light. You always had a green indication unless you had a signal in trouble. You always had a green indication. Of course, after a train passed the first signal, signal number 1, that would drop to red. After he passed signal number 2, signal number 1 went to yellow and it gave the yellow indication. After he passed signal number 3, signal number 1 went to green and gave a green indication.
- M: How did signal number 1 know that the train passed number 3?
- A: That was all controlled through the track and through what they call track relays. You had what they called a control relay on it. It is pretty hard to explain.
- M: What you are saying is the signals in a sense talk to each other?
- A: Yes, through the relays.
- M: Through the relays and through the rail?
- A: Yes.
- M: Is there some kind of current running through . . .
- A: All our track circuits were powered at that time with primary batteries, the same thing as what we used on the signals only we don't use . . . Generally, three cells to a track circuit. The track circuit in some cases ran from signal to signal. In other cases, you had two track circuits and one signal circuit. They might run a crossing start off of one track circuit. When the train passed over that track relay, it was normally energized. When they passed through it, it was deenergized and it was dropped down and that in turn would put through contacts in there, power on the contacts, and through the line wire up to a crossing to operate through another series of relays, to operate flashers or gates.
- M: I think what you are saying is that if the train was on the track between signal 1 and 2 then the current in that span was kind of negated?

- A: Yes, it was what we called shuntered through the wheels of the train itself, the engine. If you had the power on the track, if you laid a wire across it, that is what we called a shunt. That would kill your relay; it would drop your relay down and deenergize it.
- M: And make the signals go red?
- A: Yes. The wheels on the engine did the same thing.
- M: Something like a circuit breaker?
- A: Yes.
- M: Say when a train passed signal 1 and 2 and it was between signal 2 and 3, did the current return between 1 and 2?
- A: Yes. As soon as he runs off of that circuit the power, the energy returned. It picked up the first relay. That relay would be energized. It would pick up in the contacts and would refer back to the function that they were supposed to.
- M: Do you mean that there was a certain amount of energy that would operate one position on the signal?
- A: That was operated through what they called the control relay. That was a polarized relay.
- M: What I am trying to get at is that . . .The signal 1 and signal 2 have been passed and the indications on the style S signal will have to assume a new position. If the train is just beyond signal 2 then that means that the signal will go back to yellow, is that right?
- A: Yes.
- M: Well, how does the signal know to go back to yellow . . .
- A: That's what I've been trying to get at.
- M: Rather than go back to green?
- A: Signal number 2 had, and all the signals had, what they called pole changers. When your signal is in a normal position, the pole changes were made on contacts. They would put the power to the control relay in a normal position. When the train passed signal number 2, that flipped the pole changers and put the power back to the control relay on signal number 1 in a reverse position. It picked up the contacts but it flipped what they called polar contacts and that is what gave you your 45° position on your signal.
- M: So the energy was going back to a particular unit or instrument

and it knew which particular indication on the pole to go to?

- A: Yes. That was wired in on your polar relays.
- M: All right. I think I got it now. Why was this type of signal system abandoned and a newer system put in its place?
- A: In the newer system, there is less maintenance to it and there is less . . . It's a safer system really. The old style S was a good system, but it served its time. The new system is just like anything new, it's safer and there is less work to it.
- M: What could go wrong with the style S system that can't go wrong with the new system?
- A: They are really about the same as far as things that could go wrong with them. They were about the same because you still had track and you still had line wire. The line wire could break and give you restricted indication; the bonds on the rails could break or you could have a broken rail and give you a restricted indication. That part of it is the same, but there was just less maintenance on them because you had all power batteries, wet cells. It just made it a little bit easier for the men, that's all.
- M: What's a bond?
- A: A bond is a piece of copper and wire. It's about five inches long. There was a thermo powder on the joint of a rail where the two ends are joined together. It carries the current through the joint.
- M: So the two butt ends of the rail meet and it just continues a circuit?
- A: Yes.
- M: So if you broke the bonds or had a crack in the rail or a train on the track, you might get a similar signal indication on an approaching train?
- A: Yes.
- M: So the engineer may not know what was ahead but he knew that he had problems ahead.
- A: He knew there was either a train or if he called and they said that there was nothing ahead, why, he had to figure that he had problems up there. He wouldn't know whether it was a wire, a broken rail, or what.
- M: Was there ever a time when this type of signal may have given

a false indication, a wrong indication?

- A: I've heard about it but I never saw it.
- M: Do you know how that might have happened?
- A: The only way that that could have happened would have been that you got foreign current on a live wire or foreign current into your signal current somehow. That's the only way that I know of.
- M: What do you mean by that?
- A: On a pole you have numerous wires and if you happen to have a bare spot on two wires and they swung together, one of them might put a positive or a negative battery where it shouldn't be. That's about the only way. I've heard of these false clear signals that they called them but in all my time on the railroad I never saw one.
- M: So how reliable was this style S system?
- A: I think it was very reliable. We used to say if they had a red signal, they would check their brakes. (Laughter)
- M: What was the name of the new system then that replaced the style S system?
- A: That's the color light system. You got color position lights and you have color lights which . . . Style H signal, it looks like one light up there but it's got a relay in there that has the three colors on it and gives you the color indication.
- M: So it operates basically on the same principle of the style S?
- A: Yes.
- M: If there is a train immediately ahead of the signal then it would be red, and two signals ahead it would be yellow?
- A: Yes.
- M: Was there any special work you had to do in installation on these signals? Were there any problems other than just taking one signal out and attaching the power system to the new system?
- A: There had to be some wiring changes but those . . . it was still pretty much the same. I can't go into the wiring changes because I could never put it across.
- M: There are, on the railroad, three systems as far as the dispatchers and the operators are concerned called the traffic control system, the automatic block system, and the automatic permissive block

system. Would you kind of expand on that and tell me what the differences were between the three? Did the signal operate the same in all three systems or was there a difference?

- A: The signals basically operated the same, but the automatic block system . . . I think what you want is stop and go signals. Is that what you wanted?
- M: Yes, that's what I was talking about.
- A: If the signal was in a stop position, they stopped and proceeded at low speed until they passed the entire grand circuit and got a clear signal on the next block. Then they reported the one that they had stopped for.
- M: What I mean is what kind of territory were these different types of signal systems used in? I know that there are double track areas on the road and single track areas on the railroad.
- A: I worked all double track. Your single track they . . . What did you call the second one?
- M: The AP, automatic permissive block.
- A: Yes.
- M: Wasn't that signaled in both directions?
- A: Yes. And if they came while there was one in a stop position, they sat there.
- M: Why was that?
- A: Because they didn't know what was coming towards them. That's what they are using up toward Cleveland.
- M: That has one track and the trains are in both directions on the track?
- A: Yes.
- M: So you have signals in both directions and they kind of depend on each other then?
- A: They definitely depend on each other.
- M: What is the difference between that and double track?
- A: Double track, your traffic runs in one direction on a single track. You got your eastbound westbound and they are signaled east and west so they run on their own track.
- M: So an eastbound train on a westbound track would not have

signals?

- A: Eastbound train on a westbound track . . . Unless he has got permission, he's in big trouble. Your CTC, that was controlled from a given point for a number of miles. I don't know how far they could go on that but they could go quite a ways. That was controlled by your operators at a given point.
- M: What is the difference between a color light indication in double track territory or single track territory compared to a signal at an interlocking station where two different sets of tracks cross each other?
- A: Double back territory, if the signal shows a red indication, they stop and proceed. At an interlocking, if it's a positive red, they stop and either proceed on train order or sit there until the signal is cleared.
- M: As far as the signal itself is concerned, is it any different from a signal on a track out in the middle of nowhere away from everything?
- A: It is controlled by the operator.
- M: As far as the signal itself, is it the same type of signal?
- A: It is the same type of signal and has the same indications.
- M: And it operates on basically the same principle?
- A: Yes.
- M: What you are saying is that one signal is automatic and the other one is controlled by men?
- A: Yes.
- M: My question is: Are the two types of signals different from each other or is just the control of the signals?
- A: The control of the signals is different but the signal themselves . . One at an interlocking plant could be set anyplace and run as an automatic signal. If it was picked up and moved back one signal it would be the same. The only thing the interlocking has is square blades on the style S and those with the outline signals or automatic signals have pointed blades.
- M: Let's talk about railroad crossings and crossing gates that are installed at various road crossings. How do they operate? When a train approaches, what kind of signal is given so the gate will go down?

- A: There again you are into your track circuits. They operate actually the same as a set of flashers only they have a little more instruments to them and they have the gates. It is double protection and it is pretty near foolproof.
- M: Is it the same idea that when a train enters a certain circuit then the current in the rail is negated?
- A: Yes. And that in turn, like I said before, drops a relay and deenergizes it and puts power on through the contacts in the relay, takes power off of something and in turn drops the relay at the crossing, a series of relays at the crossing which in turn activates your lights and drops your gates.
- M: What is a movement detector?
- A: I never got into any of that.
- M: Do you know what they were used for?
- A: No.
- M: Can you tell me how often you would have to repair the new color light system as compared to the style S system?
- A: Are you talking signal repairs themselves?
- M: Yes.
- A: There was no set maintenance repair. If you had vandalism, why, that was your repairs. You painted them once a year, but actually there was no . . .
- M: You mean that the signals were that good that you very seldom had to repair them?
- A: Yes. You had your weekly maintenance. You had to read your batteries weekly and make a few tests on them, but there was no great repairs on them unless you had vandalism.
- M: You, as an individual, what was the name of your position?
- A: I was a signal maintainer.
- M: I suppose that you had to maintain the signals on a particular section of track . . .
- A: We maintained signals. My territory ran from a place called . . . It used to be another interlocking plant. That's just on the outskirts of Youngstown up to Warren.
- M: Did you have to work any other locations?

- A: Only in an emergency.
- M: What kind of work was involved on a daily basis?
- A: We had switches to take care of; we had signals, and we had crossings. Our switch maintenance was once a month; we got over them. They had what they called circuit controllers on them and we tested those and checked the switches. Our crossings were weekly. When we had style S signals, that was weekly. You had to go into those each week and clean your contacts and clean your motors. All this doesn't sound like much but it kept you busy all the time.
- M: Were there any regulations as far as the company was concerned that you had to meet every week?
- A: Our company required weekly testing of signals and weekly testing of crossings. Crossing tests consists of checking your lights to see that they are in focus and that the function was working properly. Switches, like I already said, you went into once a month.
- M: When did the federal government get into the process of regulating signals in?
- A: They were in before my time. I don't really know.
- M: How did they differ from the company regulations?
- A: I think the PUCO required monthly tests on crossings and switches. A lot of their tests were monthly but our company required weekly.
- M: Was the federal government involved in the testing of the equipment?
- A: Every so often they would have an ICC man come out and go over your territory. He would make tests and write up whatever was in violation which had to be repaired.
- M: What kind of experience or training did he have to do this job?
- A: I don't know. Generally, your ICC men came off of other railroads. I don't know what training they were required to have but I do know that about ninety percent of them came off of other railroads.
- M: Can you recall any of the officials that you worked under when you first started on the railroad?
- A: The supervisor when I first started was C. L. Kaster; R. L. Dikes was the signal inspector; C. A. Larson was a foreman. I can't

think of the other guy's name. After Kaster retired, we got W. C. Spang as supervisor. He left and we got R. H. Dean who is supervisor right now. Paul Boyce is signal inspector. We had a maintenance foreman by the name of J. T. Chuck; he retired and now W. R. Musser is foreman. We had as a gang foreman, H. A. Brady and Dick Huntley and now they have Larry Crawford as gang foreman.

- M: Did these men have to have any special training or did they come from the ranks of the employees themselves?
- A: Yes, they all came from the ranks. I don't know how to put it. Actually, they just learned through doing and that is the way they learned and came up through. They bid on jobs or were appointed to jobs; that's the way they got above the rank of a worker.
- M: Do you mean other than actually coming out and learning by experience?
- A: They learned by experience. Years ago it used to be that your foreman was appointed and of course your supervisors were all appointed and assistant supervisors. Now these jobs are all bid jobs. If you feel that you can handle it, you bid on that job.
- M: A man like a signal supervisor, what would he be responsible for?
- A: He's responsible for everything in the signal department and the territory that he is assigned to.
- M: Would that require him to work more than eight hours a day?
- A: A lot of times, yes.
- M: Other than your normal eight hour day, did you have to put in extra time?
- A: Only in an emergency.
- M: What would that be like?
- A: Red signals, crossing gates broken, storms put line wire down, derailments.
- M: Was there a season of the year when you seemed to have to work more in than any other?
- A: Only when it was cold and nasty and rainy. (Laughter) It seemed that any time you had any problems the weather was always bad. I sit home now when it's raining and I say that I don't care whether the telephone rings or not.

- M: Whenever the phone rang after hours, you kind of expected something?
- A: Yes. It rang at all hours of the day and night. Sometimes you would just get home and figure you could still get two hours sleep and the phone would ring again and you would be right back out.
- M: Did you have to know the entire railroad as far as the signal system was concerned?
- A: Your signal system was about the same all over the railroad. You were directly responsible for the trouble on your assigned territory. If they couldn't get anybody on the next territory, they would call you to go up and take care of whatever trouble was up there.
- M: If you can recall, what was the most difficult problem you ever ran into? Did you ever have any problems that you just couldn't seem to find the answer to?
- A: I've had a lot of those. I've sat down there and figured and figured. I got most of them and if I didn't we had a good supervisor and a good foreman. If you had something that you couldn't handle, you got on the phone and woke them out of bed. If you were really in a bind, they would come out and give you a hand. A lot of times they would sit and talk on the telephone and you went out and picked up your trouble right away. That's a good man.
- M: When he can tell you over the phone what is wrong?
- A: Yes.
- M: What kind of problems might come up that you might not know the answer to?
- A: You could get shorts. For instance, we got spring switches in Niles. I had trouble up there and I hunted and I hunted. I talked to my supervisor and he said that it sound like a short and I still couldn't find it. The next day, we were up there checking it out and it had a short. We had switch heaters on and the switch heaters were held on up against the rail by brackets that were nailed into the tie. In the process of nailing a bracket into a tie, one of the switchblades which was fastened down with a screw lag and we had driven the nail into the tie into that lag. That carried the current through that lag through the rail through a switch heater to another rail and gave us a short. I think that was one of the toughest things that I ran into.
- M: You had to be a detective to try and figure what was wrong.

- A: I worked on that three or four hours that night and then the next day we were still on it. You figure and figure and figure and then all of a sudden you spot it, the only thing it could be. We pulled the nail out and everything cleared up. It's just as simple as that.
- M: What different types of signals other than . . . as far as the names themselves are concerned, what kinds of signals did you have? The names of signals?
- A: We had style H signals; those were color light. We had style S. Right now at DeForest they have color position lights on the B&O.
- M: What's that?
- A: The color position lights are white lights but the way they light they give you a zero, forty-five, or ninety degree indication through the lights. Ninety degree I think . . . They have three lights that are vertical and a forty-five degree which would be an approach indication. They have three lights that are at a forty-five degree angle from the bottom. Of course, the red one they have the three lights that are horizontal.
- M: These units are on a rotating disc, is that it?
- A: No. These are lit through relays.
- M: Are there any moveable parts to the signal?
- A: No, no moveable parts.
- M: Then you just have a series of lights that are lined in a vertical, horizontal, and a diagonal position?
- A: Yes.
- M: Depending on what kind of signal, the different lights will light up?
- A: Yes.
- M: What type of signal is a train order signal?
- A: Train order is a two position signal, red and yellow.
- M: What was the purpose of that?
- A: That is in case you are . . . They used that if the top arm is in trouble or out of service. They will use that for switching and they will use it to make a move across the interlocking plant.

- M: Is it different from the style S or the color light?
- A: Well, it gives the same indications; they all give the same indications it is just that they are different types of signals.
- M: Do they mean something different to the engineer?
- A: No, they all mean the same to the engineer. The train order gives you either yellow or a red signal. It's in normal red position and they are using it to move the top arm . . . It'll show a forty-five, the yellow one.
- M: How did signals on the Erie differ from signals on the Penn Central or the Pennsylvania and the New York Central and the B&O companies?
- A: The Penn Central was the opposite of ours; their blades hung down. I don't even know if it was called style S or not. Our blade swung to the top and their's swung from the bottom. Did you ever see those?
- M: You mean the blades on the Erie would start in the upper most position and swing down . . .
- A: Yes, horizontal. Their's swung from a vertical and it swung up. Did you ever see any of those?
- M: I don't know if I have or not.
- A: They used a red blade.
- M: Say you decided to quit working on the Erie as a signal supervisor or signal maintainer and you wanted to go to work for another railroad, would you have to relearn . . .
- A: No, your basics would be pretty much the same; you would have to learn their identification letters but basically it would be the same.
- M: How about the different types of interlockings that exist on the Mahoning division of the Erie Railroad? Can you describe the types of interlockings and the signals that go along with the signal lights?
- A: The electrical or manual?
- M: Electrical, manual, yes.
- A: In Cleveland they have the bridge there on Westend Tower; they are both electric plants. SN is primarily a manual plant. DeForest is manual; Valley Street and Himrod are electrical.

- M: Let's start with the bridge then. The bridge is named because it has a bridge that expands the Cuyahoga River. How would you first physically describe the appearance of the bridge? What did it look like?
- A: I don't know what they call these different types of bridges. It had a super structure on it and a counter weight; it was hinged at one end. It raised for boats going in either direction under it.
- M: What kind of a power system operated the bridge?
- A: It had electric power system and they had a standby gasoline power system for the bridge itself.
- M: Was there ever a time when the bridge closed that the tracks would fail to align?
- A: Yes. They had some sort of a buffer on it that could be put down and bounce. When it did there was a circuit controller down on one of the beams underneath the bridge. It would open and then you couldn't raise or lower the bridge at all, until they would get a maintainer out there to crawl down and make those contacts.
- M: The signals at Valley Street in Youngstown, how did they operate compared to the manual form in Leavittsburg; there [Valley Street] was electric.
- A: They were electrical in Leavittsburg; there was electric at Valley Street. They were controlled through levers in the towers. The operator handled the levers to clear whichever signal he wanted clear so that they could make a train movement.
- M: Did you ever get involved in a situation where you kind of pulled a bummer and they had to ball you out for some reason?
- A: Everybody gets into it once in a while.
- M: Did you ever have any serious accidents?
- A: No. I had derailments but they were derailments that were not my fault.
- M: As far as the signal system itself was concerned, was it very efficient?
- A: Very efficient.
- M: If a particular system would break down you would have trains at a standstill until your men went to work, is that right?

- A: Yes. The good part of the signal system was that if something did go wrong, your signal went to the red position which was definitely a safety feature.
- M: How did the steam trains differ from diesel trains? Was there any extra work or added work or things that you had to do differently when they changed from one system to the other?
- A: In the steam trains, I put out more fires. Especially when I was working in Cleveland. They would come up the hill going towards Randall; they would be puffing and throwing the coal out that was hot but wasn't burnt. I was forever putting out these grass fires. The diesels, when they came along, had so much more power that they just sneaked in cars up over that hill just like you drive an automobile.

The only difference that I see between the steam and the diesel was that if you stopped a steam engine and he had a lot of cars, he had problems getting them out and getting them going again. These diesels could have a hundred car train, stop, and just pull it out like you step on the gas in your car.

- M: Were there any special problems that you had with the steam engines that you didn't have with the diesel?
- A: No.
- M: Do you think that the system that they have in operation now is a system that will last for a good length of time in the future or do you think there is a system that is better or could be made better?
- A: There is a system that is completely revolutionary, but I'm not up on it. I know on these crossings where they had two cases full of instruments and they have cut that down to one and are only using three of four units in the one case.
- M: What do you mean by a case?
- A: A case is an instrument case that houses your relays and batteries. This is something that is revolutionary because for years of all my time on the railroad we put each signal in the same way; you put everything else in the same way and now they have come along and they have cut out two-thirds of the instruments on these crossings. Through this new system they don't need it.
- M: Do they operate differently?
- A: No, they operate the same, but they have just eliminated a lot of the stuff, a lot of the insulated joints that started and ended your circuits. If I went back now--I've been off two years--I would have to get right into it in order to find out what this new stuff is all about.

- M: Do the systems change that often?
- A: No, not that often. Like I said, this is the first major change that they have had since I was on the railroad.
- M: Were there any special problems where you would have to go to someone else?
- A: I worked for Pat Brady; he was a signal gang foreman. If you got into something that you didn't understand, you went to him and sat down and he explained it until you understood it. A lot of times, it was just something that you overlooked and just sitting there talking about it brought it out and made it clear. Every once in a while you would run into something where you would sit down and work on it and if you didn't get it there was always somebody there to give you a hand. Maybe you had to hunt for them but . . .
- M: Are there more men working today in the signal department than there were when you started?
- A: No, fewer.
- M: If the signal systems are basically the same, why would there be fewer?
- A: The railroads are always trying to save a buck here and there when it comes to men. They used to have bigger gangs and I don't know whether they did more construction or not but they always had big gangs in the construction end of it. Now they are down to two or possibly three men.
- M: If you had the power to make a few changes that you think would make the railroad run more efficiently or run easier, can you give any that you would like to see made?
- A: (Laughter) No, I'll pass on that one.
- M: How did things change for you personally from the time that you started in 1946 until you retired?
- A: I started in 1941 and I was in the army for three years; I came out in 1946. I went to Cleveland as a maintainer. Actually, the change was all for the better. We were maintaining; we had motor cars. We picked those up and put them on a tractor and took them off the same way. In 1963 they got trucks which was a big improvement.
- M: Trucks that would ride on the rails?
- A: The truck that I had then didn't run on the rails, but the one that they have down in Niles now has got a high rail on it. You got around so much easier with a truck because you didn't

have to worry whether there were trains coming, or sit and wait on them or anything. You just go on the highway. Of course, you had to walk a little bit more but that didn't hurt you. Over the years you started to earn better money. I suppose it was just the fact that you went along and each day you learned something and your job just got easier.

- M: Did you work in Cleveland for a great length of time?
- A: No. I was up there about a year. I worked in a gang from 1946 until 1957. We worked in Cleveland, Warren, Youngstown, Greenville Meadville, and all over our division.
- M: What do you mean by a gang?
- A: Construction gang. We put in the new crossings, new switches, and new signals. If they moved signals, we did the work. Everybody works in the gang until they can get a chance to hold a maintenance job that they want near the home. Everybody jumped on these maintenance jobs and that's where they work the rest of their life on the railroad.
- M: The difference between a gang and a maintenance job, what is it?
- A: Your gang did the building and your maintenance took care of an assigned territory. The gang did the construction.
- M: Did you have to commute back and forth to Cleveland?
- A: Yes, we did. We had what they called camp cars but we would ride the train back and forth.
- M: Where did you live when you started?
- A: I lived in Youngstown. Then I lived on the North Side, then Austintown, and then finally here. This was the best location because it was close to Warren, close to Youngstown, and close to Sharon. I could have worked any of those jobs without many hardships.
- M: How often did you have to commute by train?
- A: When we worked in Cleveland we commuted by train. The rest of the places if you didn't want to stay in the camp cars, we drove back and forth.
- M: Do you mean sometimes you had to stay overhight in a particular location?
- A: Yes. They furnished you a cook and sleeping quarters. Nowadays they use trailers. But in those days, we had what we called camp cars. The first ones were really relics but then later on they got some troop sleepers--after the war--and they converted

those to their bunk room and kitchen car.

- M: Mobile home type?
- A: These were on the rail.
- M: Oh, they sat right on the rail?
- A: Yes. Now they are using trailers.
- M: What would they do? They would put you in the siding in the evenings?
- A: They would put it in the siding. We generally spent at least three months at a location. They would put us in a siding and then hook up wires and sewage and electric.
- M: What kind of jobs would you do that would require you to be away from home three months at a time?
- A: Up in Cleveland we worked Westend Tower over completely. That was late 1940's I guess. That took four or five months up there. So we had our camps cars in the siding and that's where we stayed. I generally came home on Wednesday and the weekends. Most of the time, if we couldn't ride a train, we would get together and drive.
- M: I guess the biggest disadvantage was that you would have to be away from home occasionally or quite often at times. How did your family react to that?
- A: I could say jumped with joy but it was tough on my wife because she had the kids and she would be alone. The thing was that it was my job and I am in no worse shape than these guys who are driving trucks and are gone for a week at a time. It's all in what you get used to.
- M: Is there ever a job that you think you might have liked to have done more in the Erie?
- A: There was a job that I wanted but I had to wait until the guy left before I took it. I took that job in Leavittsburg in 1957 and I had to wait until he retired because I didn't have enough whiskers to hold it otherwise.
- M: What I was thinking was a position for another company or another occupation entirely? Did you ever wish that you had another job?
- A: No, because I liked railroading; I liked the work. I like being outside. Even right now, the weather has to be pretty bad to keep me in because I have just worked all of my life outside and to be inside, I don't think I could ever take it.

- M: How many men did you usually work with when you went to work for a day?
- A: I had a helper and myself.
- M: Did you have to report everyday to a boss?
- A: You reported every morning to a foreman. If he had something special that he wanted us to do, he told us and we went and did it. Otherwise, we would do our work the way that we had it laid out.
- M: Did you see him personally everyday?
- A: No, just over the phone.
- M: So you were more or less on your own all of the time?
- A: Yes.
- M: Were there any major accidents that you can recall that you had to spend quite a bit of time on to restore service?
- A: In 1964, I think, they put the ore train in the river in Niles. It tore out the one side of the bridge. We worked all day and all night and all the next day. We got one track open.
- M: What happened?
- I was on the phone. The dispatcher A : They burnt a journal. called me and said to give the hot box sign. So I went out and looked up the tracks. I gave him the hot box sign and I could see the stones flying coming down the hill. I just took off. There are little curbs there in Niles. I didn't know just where those cars were going to end up. I didn't hear anything close behind me so I stopped. I saw the car with the burnt journal bounce across the crossing. I looked back and it was all in the river. I went in and I talked to Andy Gibson, I think. I said to hold everything until we found out what was going on up there. He said to take a look and let I walked up and I came back and said that they were him know. all in the river. There were twenty-four of them in the river.
- M: Twenty-four cars went into the river?
- A: Twenty-four cars in that little river.
- M: How long after the wreck did you restore service?
- A: The next morning we had the one track open. Of course, they only had the one span across the river, but they had a single line from Avon to the pipeline in order to run the trains. It was a single line that far because they only had the one . . .

- M: . . . track?
- A: Yes.
- M: This was when you were working . . .
- A: . . as a maintainer in Niles.
- M: Did you move from that position to another position before you retired?
- A: No, I stayed there. I was in Niles ten years. I went down there in October of 1963 and December of 1974 was the last day I worked.
- M: Do you have a special event like something on the order of this train crash that you think will stick with you forever or something that really made an impression on you during your career?
- A: The thing that sticks in my mind didn't happen on the Erie at all; it happened on the B&O. My daughter was taking me to work one morning and we were going across the B&O tracks in Niles. She is going to laugh at this. There was a train coming and we stopped. The only time in my life when I ever saw a pull-apart, where they uncoupled while they were moving. I heard about it but I never saw it before. They hit a rough spot there and they uncoupled. They were moving probably seven or eight cars across the crossing before they stopped. I said to my daughter, "Back up, turn around, and go around the other way because these guys are going to be here for a while." Ι don't know whether they broke a knuckle or what. It was something that I had heard about but never saw. But I actually saw it that time. That has stuck in my mind more than anything. I have seen a couple derailments; I knew they were on the ground, but that was something a little different.
- M: Did you ever know any signal maintainers who worked for other railroads while you were working on the Erie?
- A: Yes. I knew a B&O maintainer.
- M: In talking to him, did you ever come to the opinion that your problems were common problems or did you have special problems that he may not have run into?
- A: No, the problems were pretty much the same. The only difference was that he worked alone and I had a helper. You got your number one problem with vandalism and that takes about ninety percent of your trouble. You can't believe it but it really is. They steal wire off the poles. These kids who don't have anything to do walk the tracks and pry these bondwires off. They break up the lenses in your signals. That really is about ninety

percent of your problem.

- M: The kids are your chief competitors?
- A: Of course some of them were pretty good money-makers.
- M: Well, the Erie is about to go out of existence as the Erie. How do you feel about that?
- A: I don't like it because there are too many men involved. I know if I was working I would be very upset. I get around the railroad and talk to these guys and there are an awful lot of them who are real upset. I think that if the government would have given them a little help the Erie would have come out and been all right. I really do.
- M: Do you think there is anything special about the Erie that other railroads don't have?
- A: No. They claimed that they lost money for years and years, but I really think that they could have come out of it because when they had the Hurricane Agnes, that was a dominating factor right there. They tore bridges out and everything else down east. The Erie put them back and got their service going quicker than anyone. I think that the money that they spent on that could have gone a long ways toward keeping themselves. They spent a lot of money down there.

I hate to see any business go out of existence that employs a lot of men because these guys worked on the railroad all of their life and that is all they know. It's pretty hard to get a job after you have passed the fifty or fifty-five age spot.

- M: Is there any other comment that you would like to make?
- A: No, I don't think so. This is more talking than I have done in a long time.

M: Thank you.

END OF INTERVIEW