

Pittsburgh Oral Histories
Pennsylvania Department
Carnegie Library of Pittsburgh



HL

Interviewed by Barry Chad

Interviewed at the Jewish Community Center, Squirrel Hill

03-23-07

Transcribed 04-04-07 – 04-24-07

Reviewed by email 05-01-07

Interviewer's Note

A mechanical design engineer and an inventor who obviously knows what he's about. Great descriptions of jet propulsion and wind tunnel experiments during World War II. He talks about the creativity inherent in design and in design improvement and in invention: "there are no rules, no answers." A man brimming with assured self-confidence.

Interview

bc: You were talking about inventing and about medical inventions. Do you have a medical background?

HL: I'm a design engineer, a mechanical design engineer and I suffer from sleep apnea....

My patented, Aug. '2005, Snore Relief Belt (which resists supine sleeping) is now being tested by a pulmonologist on patients in two sleep labs. I developed it over the past decade with constant marketing advice by SCORE (Service Corps of Retired Executives) in my persistent search for a licensee. I have been invited to make a presentation about the SRB at the April 5, 07 SCORE business meeting. And now, as I never had before, I'll have test results [from the pulmonologist], I'll have proof that the damn thing is comfortable and it works; and then I expect to find a licensee.

bc: Where did you study engineering?

HL: Carnegie Tech. [Today Carnegie Mellon University.] Class of '43. God-willing [HL knocks on the desktop] next year it'll be my 65th College Reunion.

bc: So you're from Pittsburgh.

HL: Lived here all my life except during the War years. And, during the War years, I was very fortunate to have been given enough of a deferment to get my engineering degree. I was hired by NASA—then called NACA [National Advisory Committee for Aeronautics]. And, for four years, I was at Langley Field Research Center. I was in the Air Force Reserve—Army Air Force Reserve at that time...so [I] really completed my engineering education on the job there and then returned to Pittsburgh. In March '47 I was discharged. (I had to wait until they could find replacements for us to man the facilities there. I had no active duty

Pittsburgh Oral Histories

points...having no active duty points, I was at the end of the line: so my Honorable Discharge from the Air Force Reserve came in March '47.)

[At NACA] we did experiments on jet propulsion. (There weren't any jets at that time.) We improved the capacities, that is, the speed, air speeds on the P-38 Lightning and the P-51 Mustang. So, we were assured that our work was of sufficient value—more than carrying a rifle. And we were stationed at Langley Field; I was there for four years.

bc: Any of the planes you worked on—are they down at the Air and Space Museum in D.C.?

HL: I think so. The P-38 Lightning and the P-51 Mustang were famous World War II fighter planes and they probably are.

I was sent to York, Pennsylvania, with an older engineer. (I was a junior engineer.) We were monitoring a contractor who developed...who manufactured solid replicas of the laminar flow wing which we adapted to the Mustang to enable it to go a hundred miles-per-hour faster and cope with the Japanese Zeros. Previous to that they weren't doing so well. But, once we improved the wing structure on the P-51 Mustang, it was able to cope better in dog-fights with the Japanese Zeros. That was one of the accomplishments there. [They had] wind tunnels there, a seaplane tank—all sorts of facilities. I was one of the junior engineers that worked on design of machinery for the wind tunnels to maneuver the aircraft, the model aircraft in the wind tunnels, for testing.

We were a team: various aero-engineers and mechanical engineers like myself. I was assigned to go into the wind tunnel—into the dungeon of the wind tunnel down below where the scales were that weighed the forces when the wind rushed past the aircraft, simulating flight. Pitot tubes and various instrumentation were on them [the model aircraft] to measure the pressure; and then there were scales—like Toledo scales—down below; and there was linkage that enabled those forces to be measured on those scales. But, the whole place had to be kept under pressure to simulate faster speeds. So I had to go in there through a decompression chamber: it took 20 minutes; and they raised the pressure on my body to 35 psi. I was allowed two hours to get my measurements done in there because there was a danger of contracting the bends. (They gave me a card to wear in my shirt pocket so that if I were found comatose on the street later in the day [in Norfolk or Newport News], they would be instructed to get me back to the decompression chamber at Langley Field. But, it didn't happen because it was limited: the two hour limit seemed to work. There were no ill effects. I never had any ill effects; I don't think any of the other guys had either.)

bc: This thing sounds really primitive. It's obviously pre-computers.

HL: Oh yeah, it was a mechanical linkage to ordinary scales, large scales; and the forces on the aircraft wings, the fuselage, were translated to these scales down below in the dungeon and the whole thing—the tunnel and the dungeon under it—were all under this high pressure because, according to the mathematics of it,

Pittsburgh Oral Histories

that simulated much higher speeds. (If you subjected the aircraft to a wind of about 300 miles-per-hour, it was as though it was experiencing 600 miles-per-hour if the tunnel was under pressure.)

I started in January '43. I wasn't quite 21 yet. I got through high school and college in seven years. I wasn't quite 21 when I was down there working and learning. (I "lost" some other buddies down there, some junior engineers; they were "picked off" by these Southern Belles and some of them are grand-daddies down there now. [HL chuckles.] Fellow engineers who were dating—they were eligible—we were young men; and some of them got married to Southern Belles in Norfolk and Newport News and settled down there and they're grand-daddies now...down there. [HL laughs.] I remember one couple because it was "Larry Frost" who married "Harriet Gale." [HL laughs again.] Treasured memories of those days.)

It was before jet propulsion. We had a very small wind tunnel in which we put little aircraft models and subjected them to very high pressures to simulate jet flight. We were experimenting with jet propulsion. Some of the wind tunnels had smoke, but these had Plexiglas or Lucite walls so you could look at the aircraft and see the turbulence. Jet aircraft had to [have] a different kind of wing: [the wings] had to be stubby and different shapes than the [wings of the] prop planes.

As a mechanical engineer I worked on mechanical equipment that maneuvered—supported and maneuvered—the aircraft. A manometer would measure the pressure sometimes and I would design a device to connect the aircraft to the instrumentation—[one of which] was a manometer, that's measuring pressure by water column.

bc: How did your classes at Carnegie Tech prepare you for this?

HL: Not very well; not well at all. I was in management engineering which was good basic mechanics and machine design but we had "survey courses"—mechanical, electrical, metallurgical engineering. I came out of there not very well versed in what I was to do. I was hired by an aero-engineer from Langley Field who went to the campuses. As part of his vacation he went around and he was hiring guys, young engineers with good records (or even not so good records). Government was in competition with industry so they raised our salaries from the previous year from 1440 dollars to 2000 a year I was getting, I was offered. 2000 dollars a year. (They were big bucks.)

I went to the Draft Board. My deferment was up one day before graduation. I went to them and I was graduated in December 20, '42—six months early. (We were class of '43, but we were accelerated. We had to go through the summers.) [My deferment allowed me to complete my education provided I got into an accelerated program]: we had to do it in 39 months; and we did. And so, after 39 months, I went to the Draft Board; I said, I have a job. They said, Go, just keep us informed where you are. When I got to Langley Field, I was there for a

Pittsburgh Oral Histories

year-and-a-half. And, before the Draft Board called me, [the] Assistant Secretary of the Navy came down there and he talked to us engineers. He said, You guys should go off to [Richmond] and enlist in the Army Air Force Reserve so that we can keep you there. And we did. A group of us went up to Richmond, Virginia; we got our dog-tags and we got inducted. I was living off-base, and my landlady said, Please, be sure I have your correct home address 'cause I don't think you're coming back from Richmond if you're going up there for induction. (But I came back.) We all came back to our jobs at Langley Field.

bc: What did you do after the War?

HL: I returned to Pittsburgh and, for a while helped out in the family Five and Ten Cent Store, variety store....

Also, shortly after returning to Pittsburgh in 1947, I was recruited to solicit annual pledges for the United Jewish Federation Young Adult Division. I asked prospects to consider how much they could spare monthly. This approach earned me the 1948 post of Residential Chairman of the eastern section of the city. My four lieutenants and their captains covered 700 pledge cards.

Elaine Roth would not join the team, so I married her. In October 1950, we enjoyed an Indian summer honeymoon week in Atlantic City followed by two weeks snowed-in back in Pittsburgh. We enjoyed B'nai B'rith adult education and social events. I originated the Golden Triangle Lodge Israel Bond Club and became Chairman of the Pittsburgh Council Anti-defamation League.

While editor of the Golden Triangle Lodge newspaper, I was recruited by the disabled typist to serve on the Board of Magic Carpet Transportation Division of Open Doors for the Handicapped. I served as Board Chairman and assisted in drafting fund requests to Pittsburgh Council, Allegheny County and UMTA, the Federal Urban Mass Transit Agency.

Meanwhile, being a Roth Cousins Club "outlaw" for 57 years has enriched my life and still does although my dear Elaine passed away three years ago. I'm very proud of my professionally successful daughter and son and son-in law as well as my two bright and beautiful granddaughters.

Eventually [as far as my work life, after the War] I secured a position with United Engineering and Foundry Company, founded by Leo Frank not long after the turn of the century. He put together five shops: a machine shop, a foundry...one branch in Lawrenceville [Pittsburgh], one Youngstown [Ohio], one New Castle [Pennsylvania]. He put together five and he created the United Engineering and Foundry Company, which was doing fairly well until later on. I was employed there for twelve years and then—because there was no real distinction between engineers and draftsmen—when I became registered as a professional, the boss didn't take it well.

bc: No distinction between an engineer and a draftsman?

Pittsburgh Oral Histories

HL: That's right, that's right. They didn't want us to be getting too uppity and want more money. So, I took the hint: some years later I went over to U. S. Steel. (They were hiring.) I got a job as a project engineer and a better salary and fringes. The boss at United had said, Well that's nice: you're registered; we'll put that in [your] record. I said, Well what good does that do in your record? [The boss said,] Well, if you go somewhere else, it'll be in your record. I said, Well, if I go somewhere else, I don't need your record. So, I did go somewhere else: and, I was at U. S. Steel for five years as a project engineer. At that time we were in the Gulf Building. I was doing evaluations of equipment for customers and for U. S. Steel.

I was granted one patent while I was there—and, of course, it was assigned, but they gave me a bonus of two weeks salary when my device was patented. It had to do with outdoor cranes—how to anchor them against windstorms. When the wind came up, the guy in the pulpit was supposed to set track brakes. He's way up in the pulpit. He's got controls up there and he can work the rails by means of remote-controlled track brakes, but that was an extra that U. S. Steel thought was too expensive and they wanted to figure out a way to do it otherwise. And so, I was assigned to do something about this which didn't depend on track brakes. So, I used a pair of railroad car couplers. I put one half of the coupler on the crane and the other on the post at the end of the runway; and then, when the crane came down the runway, the couplers [HL smacks his palms together] locked. And held. And this was done by remote-control again. There was a solenoid connection that caused the couplers to automatically come together. (Well, they automatically did come together. What you needed was how to release 'em.) When the crane went down the runway and slammed into the bumper at the end of the runway, the couplers automatically came together. But, then, to free the crane, when the wind subsided—or the next day—the man in the pulpit pushed a button and that operated some solenoids and that opened the coupler so he could pull back onto the track.

Then, at U. S. Steel it was a “black Friday.” And after five years...we were permitted to use the phones to get another job. I got another job very quickly and was on salary at two places.

bc: “Black Friday”?

HL: That was a big layoff. When they [U. S. Steel] moved to the triangular “iron monster” building [600 Grant Street] from the Gulf Building and others, they decided they'd have to cut people.

bc: How do you go about problem-solving?

HL: Well, you develop a certain creativity because...that's what you're doing when you design machinery. Usually you'll start with equipment that exists and you're going to try to improve it or, in this case [the instance of the track brakes and the couplers], replace it. There are no rules, no answers. You just have the machine design, the engineering mechanics knowledge by which you can lay out on the drawing board a design...and gradually you try to arrive at a solution. Of course in those days it was all with drawing boards and T-squares and triangles. (There

Pittsburgh Oral Histories

were no CAD [Computer-aided design] machines yet.) And so, you painstakingly worked on a sheet of vellum with mechanical pencils and lots of erasing until you got it right. And then, when you thought you had it right, then prints were made and the draftsmen (or you yourself in this case—usually myself) would prepare shop drawings. And then the checker would always—when you completed drawings for the shop, an independent checker was required to look at them: someone who was also a designer, but took a fresh viewpoint because he would pick up sometimes errors that would be very expensive. I moved on from designer to checker at United and that was an interesting experience. Sometimes there was litigation involved if a mistake was made...and the manufacturer was liable sometimes....

When I first came to Pittsburgh I worked for a small engineering company, Mountaineer Engineering, and they liked to send us up to the sites. We were converting armories into training centers for the Navy: they would take equipment off of ships that were no longer needed and the equipment was installed in the armories. And so I worked at Lima, Ohio, and Waukegan, Illinois, [near the Great Lakes]. They sent me out to various places. They wanted us to come home every weekend because they were getting “cost plus”; and, the more it cost them to employ us, the better they were paid. So, I worked for Mountaineer Engineering Company for a while and, [on] one occasion, Mountaineer was being sued by a ceramics company making dishes in Ohio. (I think it was called Scio Manufacturing.) And Scio bought some machinery from Mountaineer Engineering Company to transfer plates from one place to another, stack them; and doggone machine was smashing the plates. So they [Scio] wouldn't pay; so it came to litigation. And this senior engineer was checking his own work and he went over his own work and he kept on making the same mistake all the time and it was just a matter of left hand or right hand with certain cams. [As a young engineer], I was the only qualified one to look at it again and I did and I found the error. [HL chuckles.] And [the senior engineer] was embarrassed, oh was he embarrassed. Well, anyway I don't know what happened with the litigation. All I know is I picked it up. [HL laughs.] So there was a settlement—I suppose. That's what a checker does. A checker must be independent. He must be another designer who has not designed the machinery himself but who looks at it from a fresh viewpoint.

bc: How did you adapt to computers coming into your profession?

HL: I retired about a decade ago in '96. During my career...at United Engineering we had some computers that were the size of spinet pianos and they couldn't do anything as well as a hand-held computer today and they worked on paper tape and you programmed them laboriously and that was what we started with. But, by the time I was retiring we had modern computers and I was able to learn how to use software for designing. And so therefore, after retiring, I had pretty good experience and, to this day, I'm comfortable with a computer. I do a lot of email and Internet research and so on.

Pittsburgh Oral Histories

This past century I went through an awful lot of adaptation to modern technology. I saw such tremendous progress in industry and everywhere. It was long before “the information age” that I was really active in my profession. Long before the information age. And then, I say, I worked with primitive tools—drawing board, T-squares.... And then again where I spent most of my time at United Engineering, they hired separate trained computer-drawing people, CAD people, computer-assisted drawing people, who had no real design experience. All they did was transfer our drawings to the computer. It was very wasteful, very wasteful, very unprofitable. Because you design something—the drawings were made—and then they put them on the computers and you had, sort of, a double team there. At that time they were in a separate room. Now, today—later on—the designer sits at the computer and he does the designing on the screen, but that was a totally separate operation—the design and drafting in one room and the computerization in the other room where they made the CAD drawings.

bc: In your opinion, how is American industry conducting itself in keeping on top of what’s happening in the world economy?

HL: I was in the steel industry during the good days and bad. At U. S. Steel we got all the benefits without being union that the Steelworkers got ‘cause they wanted to discourage us from unionizing. So therefore, we got all these fringe benefits along with the USW [United Steelworkers] and there wasn’t enough jawboning by the government to help. Labor got the upper hand and steelmaking became very expensive but the technology improved—but the workers wanted more money and etcetera etcetera. Finally, the old ways of doing things caused U. S. Steel to kind of lose out: new steel producers in the Southwest picked up on it—continuous casting. Well...U. S. Steel had continuous casting—late. The old blast furnaces and open hearth furnaces disappeared. I worked on—in basic steel—I worked on basic oxygen process furnaces that could make a big batch of steel in less than an hour instead of eight hours in the open hearth. And, I worked on rolling mill machinery that rolled out the steel.... I experienced all this progress in the steel industry—and we sold engineering to Korea and others: we sold know-how. Eventually they used it to overtake us! [HL chuckles.] But now there are still efficient producers in this country and, finally, I think, U. S. Steel also is catching up and the industry is, lately, reviving.

bc: How many years did you spend in the steel industry?

HL: Well, I would say all of my career from 1947 to 1997, about 50 years. [By the Fifties, blast furnaces] were dying out. I didn’t get into basic steel until I was with U. S. Steel. At United Engineering we worked on equipment to take the ingots down to products, steel products...rolling mills that reduced the ingots to slabs and the slabs to sheet and bars. There were upcoilers and downcoilers and all kinds of machinery that I worked on, designed. We improved all those. Steel mill machinery was my game until I went to U. S. Steel and then I got into basic steel, meaning the replacements for the blast furnaces and open hearths—the basic oxygen furnaces and the continuous casters. So I got a panoramic view of all these things.

Pittsburgh Oral Histories

I went back to United Engineering after 28 years: I came back as a consultant part-time and I wrote operating and maintenance manuals. I compiled them, that is. I got all the literature from the vendors who supplied many many components and then I also wrote procedures to tell the operators how to run the mill. And I did that for United Engineering. (28 years later I started doing it.) And I found one of my old drawings in files and sent off copies to my grandchildren to show them that I could draw also: a drawing I made in 1954, very laborious, very complicated cross-sections through a downcoil.

bc: Who were your manuals directed to?

HL: The manuals were directed to the operators of the steel mills, to the operating people there, the people in the pulpits. Eventually, with computers and all, they [the computers] got up into the pulpits, but, regardless of how they did it, I needed to collect and compile the literature for every kind of equipment made by bearing and gear and other component manufacturers into volumes. And then I had to give directions on how to change the rolls and so on. I worked on the development of automatic roll-changing equipment that came in and took the rolls out of the mill, whirled around and put new sets of rolls in there. I really worked quite a bit on the design of those things. (United Engineering and Mesta [Mesta Machine-Building Plant in West Homestead] were kind of watching each other very closely. Sometimes Mesta drawings would appear; and sometimes they'd get hold of United drawings and then there was some litigation about that too. I think Mesta was sued by United for infringements and all that. That was going on too.) I did a lot of technical writing—oh yeah sure, that's what I was doing when I came back to United Engineering. And also at U. S. Steel. [My objectives when I did technical writing were] to state in language, to state in language how the equipment worked and how to maintain it and how to do replacements of parts—everything to do with the operation and the maintenance of the steel mill equipment. And that required very careful study of manuals supplied by the component people, that is, smaller manufacturers.... You know, U. S. Steel bought machinery from United Engineering, but United Engineering subcontracted a tremendous [number] of orders to Timken—bearings, for example—the Timken Bearing Company that made the huge bearings for the rolls and smaller bearings for machinery and equipment. And, there were any number of suppliers, all of whom were lined up, and they bid to United Engineering; and United Engineering incorporated their components into the machinery and then the machinery was shipped and I wrote up and compiled the directions, the directions on how to use them.

bc: This is fascinating—because, I'm like a kid who grows up in the city and has never seen a chicken or a cow: here's the milk in the bottle and here's the egg in the carton. What you're describing is how we get...how all of this stuff comes to be.

HL: Oh yeah, right, right. Very similar to Miss [Dowfield] my kindergarten teacher. (I remember her name.) Because Miss [Dowfield] took us out to a farm and showed us where milk really came from. It didn't just come in glass bottles. I'll never forget that experience. [HL laughs.] Same idea.

Pittsburgh Oral Histories

bc: Let's jump back to your childhood. Where was your family's Five and Ten located?

HL: In East Liberty. Across from the Enright Theater. Near the Broad and Euclid police station.

bc: Are you an East Liberty person?

HL: No, I grew up in Squirrel Hill and we went broke during the Depression and lost everything—the business, the home, everything. My father, in the wholesale business, was selling to merchants throughout the tri-state area and he had a large accounts-receivable. And, came the Depression, these guys wouldn't pay. But his creditors were closing in, causing him to go bankrupt. That way he lost the house too because mortgages—you paid only interest, and they were automatically renewed every so often, the mortgage was renewed until that last time. And then we couldn't cope. And he tried to get a loan from the FHA [Federal Housing Administration]. And I was just old enough to appreciate what was happening. I was ten or twelve years old and I could see [if] he applied to the FHA, the payments would be too steep. So, we had to leave the house. \$5000 was the kind of money that he kept turning over in the business and he wasn't going to pay off the mortgage if he didn't have to. Well, until they finally demanded it and he didn't have it. So we moved to a flat on Eldridge Street. Lost the house on Tilbury Street; moved to a flat on Eldridge Street. I was at Carnegie Tech when we then moved from there into East End on Margareta Street, now East Liberty Boulevard, in order to be close to the Five and Ten, the Penn Five and Ten, our business. So, [when I was] 20 we moved over to East End where I met my wife, the woman I married.... We helped Dad. My mother gave up teaching piano and she came into the business.

bc: Are you musical?

HL: No, I'm not; I fought her off. Anyway, my mother, my sister and I and granddaughters, all pitched in at this variety store in East Liberty. Which was finally "redeveloped" out of there. [HL laughs.] And my father made a choice. He didn't have anything else on his mind except the business. They gave him a choice of either quitting or moving and he took the moving allowance which [was] \$3000 and we moved up to Highland Avenue and that was a disaster. It was right across from Sears and we didn't have enough market capital. Well, that lasted about eight months. He was really sick and in such poor health that he had to die with his boots on. So, I had to liquidate the business, and that wasn't easy.

bc: So your father was both the merchant who ran this store and he was also a jobber?

HL: Previously he was the jobber; when he went broke as a jobber, then we bought a small Five and Ten—that small Five and Ten in '41 in East Liberty. And, with his merchandising experience, he made it go. So, we were very prosperous in the '20s; [we went] almost completely broke in the '30s; and back up in the '40s. During that Depression we lost the jobbing business, the wholesaling business; and then we borrowed from an uncle who survived the Depression, we borrowed a few thousand dollars to buy this Five and Ten—which wasn't making a good living. It was run by an old couple who didn't take in very much and it was in competition with Murphy's and a Woolworth's further up Penn Avenue. But our

Pittsburgh Oral Histories

customers came in their work clothes; they didn't feel like going up into East Liberty. And there were shortages due to the War.

bc: "They came in their work clothes"—meaning that, if you went to the other stores, you had to dress up?

HL: Well, they didn't feel comfortable about it. They didn't feel comfortable about walking up into East Liberty...the workers around in that area.... We got enough customers from the immediate area up there toward Negley...between Highland and Negley; and that area of housing that was redeveloped out of there first. First they "redeveloped" the customers away; and then our business went to hell. And then they "redeveloped" us out of there. In 1962 is when redevelopment [hit] and we were forced to move. And you couldn't compete with Sears. That was a real loss; that was a disaster, another disaster.

bc: Elementary school and high school?

HL: Right here in Squirrel Hill. I was at Colfax School and then went to Allderdice. Six years at Colfax School and six years at Allderdice.

bc: How did you decide to specialize in engineering?

HL: I didn't. I backed into it. I was at the top of the class. We had a class of over 500 at Allderdice and I was very near the top. So, I got an interview with Mr. Quick, the Registrar at Pitt who came to our high school. And Mr. Quick lived up to his name: he quickly dismissed me and wouldn't consider me for a scholarship and that was that. Obviously we didn't hit it off. But I had taken the Civic Club test. (In those days there was a community organization called the Civic Club.) And I took the Civic Club test. So, with my good record and the Civic Club test, I got a call from Carnegie Tech and I went down to see the Registrar there. He said, What are you doing now? I said, Well, I got five bucks a week for working at my Dad's wholesale place and doing the wrapping and bookkeeping and whatever it took. And he said, Well, five dollars a week he can get some other kid for five dollars a week. We'd like you here. And he gave me a half-tuition scholarship for my first two years at Carnegie Tech, providing I'd keep up my grades—which I did. Then I was given a choice of gym or ROTC [Reserve Officers' Training Corps]. I didn't give that too much thought before I realized I'd rather play handball than be marched around the campus; so I chose gym. A lot of my buddies who chose ROTC went directly into the Service, but I went into a job because I was available. I was not in ROTC. The Draft Board didn't bother me; they let me finish. I got down to Langley Field; they had me enlist in the Army Air Corps Reserve and so, instead of being sent on active duty, I worked as an engineer at Langley Field.

bc: How has Pittsburgh changed in your lifetime?

HL: Well, Pittsburgh has been redeveloped a couple of times at least: a big Renaissance between Mayor Lawrence and the Mellons. That was tremendous. The smoke is gone. The mills are gone. (Except for Clairton Works and a few others.) But the chemicals are still in the air. It's not a healthy climate here at all. You don't see the smoke; you don't smell the smoke. But the chemicals are all in the air. So I went through that transition; I saw all that happening, saw the mills closing down and the commerce springing up. Culturally—oh boy! New York

Pittsburgh Oral Histories

Broadway shows would not come here. No traveling shows would come here. It was too expensive. It was too expensive. We had the Nixon Theater.... We didn't have much theater.... And big hit shows from the East didn't come here very much because it was too expensive. And somehow we developed into a bigger city that had better theater...and [things] started coming here...and today we have ...so much more to do. The culture today is [light years] above what it was when I was younger. We have this world-class Symphony. We have world-class teams....
bc: What did you do for entertainment as a kid? What did your family do for entertainment?

HL: Not much. Before the Depression we were well-off. My Dad and his partner were successful wholesalers; they traded their Buicks every year [bc finds that very funny], traveled as far East as Johnstown, as far West [as] Ohio and West Virginia and transferred a lot of merchandise to these small retailers. So we went to Atlantic City for the summer and laid out in the sun. My mother and my sister and I checked in at Kaufmann's Hotel for the summer and Dad came down, commuted down there. We laid out on the beach.... Those were the good old days. Dad would come down on the weekends. We would spend the summer there. But then came the Depression and everything went to pieces. We hardly had money to go to the movies. So, mostly we went to the Manor Theater on Murray Avenue. Then came the Beacon Theater, which is now Gullifty's Restaurant. And then came the Squirrel Hill Theater.

bc: So Gullifty's used to be a movie theater.

HL: Yeah, it used to be the Beacon Theater.

bc: That explains why it looks the way it does.

HL: It was converted from a theater. It's got a marquee and all that. I worked across the street during high school. I worked for the Beacon Pharmacy. Had to supply my own transportation, a bike, and keep it repaired. And I worked from six in the evening 'til midnight for a dollar-and-a-half. And tips.

bc: A dollar-and-a-half an hour.

HL: No! For the whole thing! For six hours! I got a dollar-and-a-half, but I earned a buck or more in tips!

bc: So you delivered.

HL: Wait a minute! I think I got a dollar and I averaged a dollar-and-a-half in tips! Yeah, delivering on a bike. Cartons of Cokes and heavy stuff and all—over my shoulder and a basket in the front of the bike and then I'm keeping the bike in repair and everything like that. So, to keep clothes on my back when I was in high school, I worked these shifts—'til—after midnight I could have anything I wanted behind the fountain and I made myself milkshakes that were too thick to pour. I got to bed around one o'clock and got knocked out of bed in the morning to go to school—at the last minute. I got in at one o'clock and had to get up at about 7:30...eight o'clock to go to high school; and high school was right behind our house so I hopped over the fence and into high school. But that routine just ruined my bio-rhythm. I never got enough sleep.

During my youth—it was still before the first Renaissance. (I was in high school before the first Renaissance.) I finished high school in '39, June '39. So, June '39 we were still not quite out of the Depression, not quite into the War. See, that was

Pittsburgh Oral Histories

still tough going, really tough, oh yeah. Besides which I was undersized. I didn't mature into a full-size adult 'til very late. As a Senior I was like 90 pounds, and I just was a lightweight kid. And that didn't help my morale at all. The gym teacher lined us up—30 Of us—by height so she could remember who we were. I was number three in the line. There was Alvin Siegel, Burt Miller, and me; and then 27 other guys. So I was a little squirt.

bc: But then you sprouted up.

HL: Late, very late. By the time I finished high school maybe. I was still pretty small getting into college. Honestly. I matured very slowly. I got picked the last for teams and bullied around quite a bit.

bc: I sympathize. I know what that's like.

HL: Those were tough days. I had a happy childhood up to about ten or twelve and a very unhappy childhood from there until college.

bc: What have you been doing since you retired?

HL: I've done a lot of community service. As I said, I was active in the Anti-Defamation League. I'm in the Academy of Lifelong Learning at CMU. I've been in it for a decade—almost since I retired. So I'm busy all the time; and my invention, I'm still working on it.