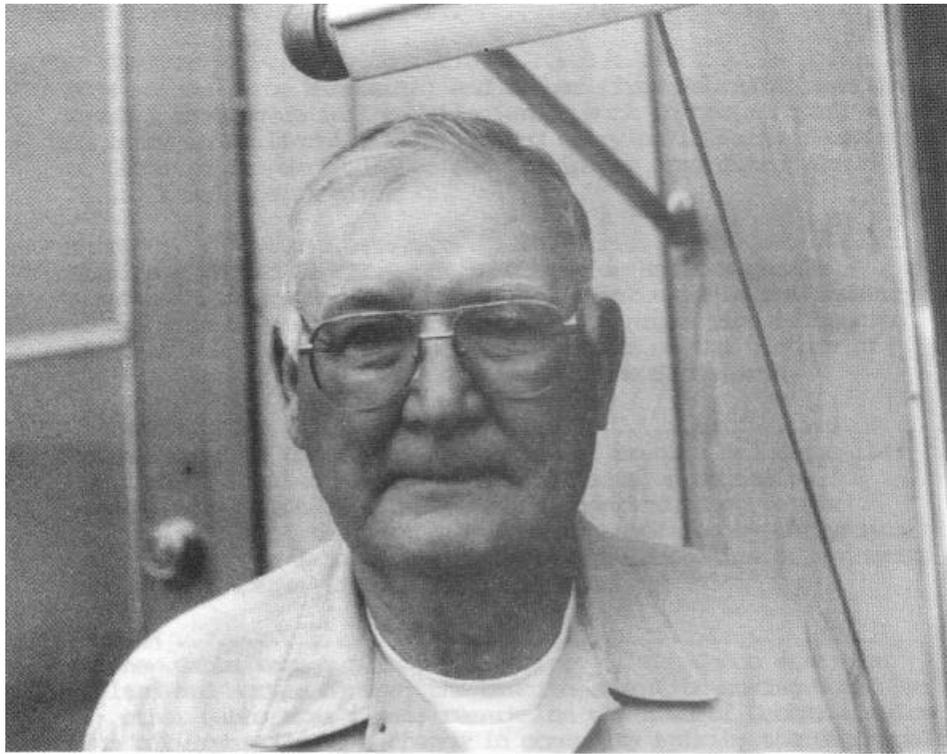


An Interview with ED ALWORTH

An Oral History conducted and edited by
Robert D. McCracken

Nye County Town History Project
Nye County, Nevada
Tonopah
1990

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89049



Ed Alworth
1990

CONTENTS

Preface

Acknowledgments

Introduction

CHAPTER ONE

Ed's mother (from Minnesota) and father (from Nebraska) met in Nevada; growing up in the Fallon area; work in the aircraft industry in California; ranching and dairying in Fallon; moving to Gabbs in the early 1950s; service in the army during World War II and knowledge of aircraft.

CHAPTER TWO

Service in World War II; work in Gabbs for Basic Magnesium –plant maintenance and work on the equipment used in the industry; description of mining and wing ore; the production of brucite and uses for the material; some information on the history of the brucite and magnesite operations in the Gabbs area.

CHAPTER THREE

Further description of the production of brucite and magnesite; the international community and its effects on magnesite production; promotion to maintenance superintendent; a new floatation plant; the purchase of Basic Magnesium by Engineering; the labor force at Gabbs; the economics of magnesite production; thermal ground water in Gabbs.

CHAPTER FOUR

The new Gabbs sewage plant; the geology of the Gabbs area; Pat Willard and Norman Hanson; the brucite operation during World War II; other Gabbs area mines; remarks on the town of Gabbs; service as a city councilman; a change in community spirit; the Gabbs golf course and community organizations.

CHAPTER FIVE

Gabbs area recreation; mining tungsten, gold, antimony and mercury in the Gabbs area; lone in the 1950s; contrasting Gabbs when it was prospering and at present, when lousiness is slower.

Index

PREFACE

The Nye County Town History Project (NCTHP) engages in interviewing people who can provide firsthand descriptions of the individuals, events, and places that give history its substance. The products of this research are the tapes of the interviews and their transcriptions.

In themselves, oral history interviews are not history. However, they often contain valuable primary source material, as useful in the process of historiography as the written sources to which historians have customarily turned. Verifying the accuracy of all of the statements made in the course of an interview would require more time and money than the NCTHP's operating budget permits. The program can vouch that the statements were made, but it cannot attest that they are free of error. Accordingly, oral histories should be read with the same prudence that the reader exercises when consulting government records, newspaper accounts, diaries, and other sources of historical information.

It is the policy of the NCTHP to produce transcripts that are as close to verbatim as possible, but some alteration of the text is generally both unavoidable and desirable. When human speech is captured in print the result can be a morass of tangled syntax, false starts, and incomplete sentences, sometimes verging on incoherency. The type font contains no symbols for the physical gestures and the diverse vocal modulations that are integral parts of communication through speech. Experience shows that totally verbatim transcripts are often largely unreadable and therefore a waste of the resources expended in their production. While keeping alterations to a minimum the NCTHP will, in preparing a text:

- a. generally delete false starts, redundancies and the uhs, ahs and other noises with which speech is often sprinkled;
- b. occasionally compress language that would be confusing to the reader in unaltered form;
- c. rarely shift a portion of a transcript to place it in its proper context;
- d. enclose in [brackets] explanatory information or words that were not uttered but have been added to render the text intelligible; and
- e. make every effort to correctly spell the names of all individuals and places, recognizing that an occasional word may be misspelled because no authoritative source on its correct spelling was found.

ACKNOWLEDGMENTS

As project director, I would like to express my deep appreciation to those who participated in the Nye County TOWn History Project (NCTHP). It was an honor and a privilege to have the opportunity to obtain oral histories from so many wonderful individuals. I was welcomed into many homes--in many cases as a stranger--and was allowed to share in the recollection of local history. In a number of cases I had the opportunity to interview Nye County residents whom I have known and admired since I was a teenager; these experiences were especially gratifying. I thank the residents throughout Nye County and Nevada--too numerous to mention by name--who provided assistance, information, and photographs. They helped make the successful completion of this project possible.

Appreciation goes to Chairman Joe S. Garcia, Jr., Robert N. "Bobby" Revert, and Patricia S. Mankins, the Nye County commissioners who initiated this project. Mr. Garcia and Mr. Revert, in particular, showed deep interest and unyielding support for the project from its inception. Thanks also go to current commissioners Richard L. Carver and Barbara J. Raper, who have since joined Mr. Revert on the board and who have continued the project with enthusiastic support. Stephen T. Bradhurst, Jr., planning consultant for Nye County, gave unwavering support and advocacy of the project within Nye County and before the State of Nevada Nuclear Waste Project Office and the United States Department of Energy; both entities provided funds for this project. Thanks are also extended to Mr. Bradhurst for his advice and input regarding the conduct of the research and for constantly serving as a sounding board when methodological problems were worked out. This project would never have become a reality without the enthusiastic support of the Nye County commissioners and Mr. Bradhurst.

Jean Charney served as administrative assistant, editor, indexer, and typist throughout the project; her services have been indispensable. Louise Terrell provided considerable assistance in transcribing many of the oral histories; Barbara Douglass also transcribed a number of interviews. Transcribing, typing, editing, and indexing were provided at various times by Jodie Hanson, Alice Levine, Mike Green, Cynthia Tremblay, and Jean Stoess. Jared Charney contributed essential word processing skills. Maire Hayes, Michelle Starika, Anita Coryell, Jodie Hanson, Michelle Welsh, Lindsay Schumacher, and Shena Salzmann shouldered the herculean task of proofreading the oral histories. Gretchen Loeffler and Bambi McCracken assisted in numerous secretarial and clerical duties. Phillip Earl of the Nevada Historical Society contributed valuable support and criticism throughout the project, and Tan King at the Oral History Program of the University of Nevada at Reno served as a consulting oral historian. Much deserved thanks are extended to all these persons.

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--Robert D. McCracken
Tonopah, Nevada
1990

INTRODUCTION

Historians generally consider the year 1890 as the end of the American frontier. By then, most of the western United States had been settled, ranches and farms developed, communities established, and roads and railroads constructed. The mining boomtowns, based on the lure of overnight riches from newly developed lodes, were but a memory.

Although Nevada was granted statehood in 1864, examination of any map of the state from the late 1800s shows that while much of the state was mapped and its geographical features named, a vast region--stretching from Belmont south to the Las Vegas meadows, comprising most of Nye County-- remained largely unsettled and unmapped. In 1890 most of southcentral Nevada remained very much a frontier, and it continued to be for at least another twenty years.

The great mining booms at Tonopah (1900), Goldfield (1902), and Rhyolite (1904) represent the last major flowering of what might be called the Old West in the United States. Consequently, southcentral Nevada, notably Nye County, remains close to the American frontier; closer, perhaps, than any other region of the American West. In a real sense, a significant part of the frontier can still be found in southcentral Nevada. It exists in the attitudes, values, lifestyles, and memories of area residents. The frontier-like character of the area also is visible in the relatively undisturbed quality of the natural environment, most of it essentially untouched by human hands.

A survey of written sources on southcentral Nevada's history reveals some material from the boomtown period from 1900 to about 1915, but very little on the area after around 1920. The volume of available sources varies from town to town: A fair amount of literature, for instance, can be found covering Tonopah's first two decades of existence, and the town has had a newspaper continuously since its first year. In contrast, relatively little is known about the early days of Gabbs, Round Mountain, Manhattan, Beatty, Amargosa Valley, and Pahrump. Gabbs's only newspaper was published intermittently between 1974 and 1976. Round Mountain's only newspaper, the Round Mountain Nugget, was published between 1906 and 1910. Manhattan had newspaper coverage for most of the years between 1906 and 1922. Amargosa Valley has never had a newspaper; Beatty's independent paper folded in 1912. Pahrump's first newspaper did not appear until 1971. All six communities received only spotty coverage in the newspapers of other communities after their own papers folded, although Beatty was served by the Beatty Bulletin, which was published as a supplement to the Goldfield News between 1947 and 1956. Consequently, most information on the history of southcentral Nevada after 1920 is stored in the memories of individuals who are still living.

Aware of Nye County's close ties to our nation's frontier past, and recognizing that few written sources on local history are available, especially after about 1920, the Nye County Commissioners initiated the Nye County TOWN History Project (NCTHP). The NCTHP represents an effort to systematically collect and preserve information on the history of Nye County. The centerpiece of the NCTHP is a large set of interviews conducted with individuals who had knowledge of local history. Each interview was recorded, transcribed, and then edited lightly to preserve the language and speech patterns of those interviewed. All oral history interviews have been printed on acid-free paper and bound and archived in Nye County libraries, Special

Collections in the James R. Dickinson Library at the University of Nevada, Las Vegas, and at other archival sites located throughout Nevada. The interviews vary in length and detail, but together they form a never-before-available composite picture of each community's life and development. The collection of interviews for each community can be compared to a bouquet: Each flower in the bouquet is unique--some are large, others are small--yet each adds to the total image. In sum, the interviews provide a composite view of community and county history, revealing the flow of life and events for a part of Nevada that has heretofore been largely neglected by historians.

Collection of the oral histories has been accompanied by the assembling of a set of photographs depicting each community's history. These pictures have been obtained from participants in the oral history interviews and other present and past Nye County residents. In all, more than 1,000 photos have been collected and carefully identified. Complete sets of the photographs have been archived along with the oral histories.

On the basis of the oral interviews as well as existing written sources, histories have been prepared for the major communities in Nye County. These histories also have been archived.

The town history project is one component of a Nye County program to determine the socioeconomic impacts of a federal proposal to build and operate a nuclear waste repository in southcentral Nye County. The repository, which would be located inside a mountain (Yucca Mountain), would be the nation's first, and possibly only, permanent disposal site for high-level radioactive waste. The Nye County Board of County Commissioners initiated the NCTHP in 1987 in order to collect information on the origin, history, traditions, and quality of life of Nye County communities that may be impacted by a repository. If the repository is constructed, it will remain a source of interest for hundreds, possibly thousands, of years to come, and future generations will likely want to know more about the people who once resided near the site. In the event that government policy changes and a high-level nuclear waste repository is not constructed in Nye County, material compiled by the NCTHP will remain for the use and enjoyment of all.

—R.D.M

This is Robert McCracken talking to Ed Alworth at his home in Gabbs, Nevada, April 17, 1990.

CHAPTER ONE

RM: Ed, why don't we begin by you telling me your name as it reads on your birth certificate.

EA: Frances Edward Alworth.

RM: And when and where were you born?

EA: I was born in Fallon, [Nevada], April 1, 1920.

RM: And what was your mother's full name?

EA: Elizabeth Schindler.

RM: And when and where was she born, do you recall?

EA: She was born in Minnesota, but I don't remember the town or the date.

RM: What sort of activity was her family involved in?

EA: Mostly all dairy and ranching. Her father was a native of Switzerland and he followed the Holstein cow business and [had] dairies.

RM: And then what was your father's full name?

EA: Louis Alworth.

RM: And where was he born?

EA: He was born in Hemingford, Nebraska.

RM: What kind of activity was he involved in?

EA: He was mostly in ranching.

RM: How did he meet your mother?

EA: He came with his dad into Fallon in the early days, and her folks had moved to Canada and then into California. When the Homestead [Act] came to Fallon, the Schindlers went in and homesteaded in the Sheckler district. My dad was working for a ranch there somewhere and my wither was the housekeeper, and they met.

RM: That would have probably been around 1915 or so?

EA: They got married after he came back from the war - about 1918, somewhere in there.

RM: And when did they open up homesteading at Fallon?

EA: I have an idea it's when they started building the Lahontan Dam. The railroad had them open this land up for homesteads and that's when they came in, so it was probably 1908 or '10 or so.

RM: Yes. And then you were born in Fallon. Were you raised there?

EA: Yes.

RM: Where did you live in Fallon when you were growing up?

EA: We lived at different ranches and in town.

RM: Your dad worked for various ranchers?

EA: Yes.

RM: How far did you go in school in Fallon?

EA: I graduated from high school.

RM: What year was that?

EA: 1940.

RM: Just in time to get in World War II? Were you in the service?

EA: Right.

RM: How old were you when you went in?

EA: I was 22. I left Fallon . . . I was working at the Summit King Mine out of Fallon and got in a little cave-in. In order to retrain me they sent me to San Diego Aviation School and then I worked for Consolidated Aircraft down there until Decanter of '42. Then I went in the service.

RM: Were you hurt in that cave-in?

EA: Just wrenched my knees.

RM: Where is the Summit King Mine?

EA: That's a gold and silver mine about 30 miles east of Fallon.

RM: Is it still operative?

EA: No. It's been abandoned since a little while after World War II.

RM: Did you kind of drift into the mining business from high school?

EA: Well no, from high school I was in the aircraft business for quite a while. Then I got out of there and was working for contractors and then I went to work for the railroad. Then I went into ranching - I took over my granddad's ranch, and leased another ranch, and went into the dairy business.

RM: This was before you went into the service or after?

EA: No, this was after.

RM: What were you doing prior to coming to Gabbs?

EA: I was in the dairy business.

RM: You were in the dairy business in Fallon?

EA: Yes. And I worked for another big rancher. I was supervising a ranch for Frank Brannon and then I decided to go back into construction the next year, so I left there. I figured I'd put the winter in Gabbs, and I never left.

RM: That was in '51?

EA: Yes.

RM: What brought you to Gabbs?

EA: I just needed a job for the winter and figured it'd be a good place to winter. I had my aircraft mechanic's training and this company needed that type of maintenance work.

RM: How was the Gabbs operation in '51?

EA: It was a lot smaller. There were lots of empty houses and there was nothing in the west end of lower Gabbs at that time.

RM: There was nobody living here?

EA: No, not down here.

RM: Just the vacant houses . .

EA: No houses, no nothing.

RM: You mean the houses weren't here? I thought they built the houses during World War II.

EA: The houses that were built by the government were up on the other side of the school. Down here they had little 4-plexes - hundreds of them.

RM: Oh, down where you are on the west side of the school was where the apartments were.

EA: Right.

RM: And there was nothing here when you came because they'd moved the apartments out, hadn't they?

EA: Right. These houses - this house and that one and some office buildings up at the plant - came from the Kaiser mine; they were originally built in Yerington. These are roll-away homes. Of course, we've built an addition on this one, but that one's just 26 feet wide.

RM: Did they have a lot of houses out at the Kaiser mine?

EA: Not too many.

RM: What kind of a mine was the Kaiser mine?

EA: Fluorspar.

RM: And they were using it for their steel, weren't they?

EA: Yes. Steel and some glass, I think, or something.

RM: Was the Kaiser mine a big mine?

EA: No, not really big. It was a good mine. The ore was fairly high- grade and after Kaiser bought it out . . . it had been the Baxter mine. Vet Baxter owned it, and he sold it to Kaiser. Then Kaiser built a mill in Fallon and they transported the ore to Fallon and upgraded it. That went on for about 5 or 6 years.

RM: When did Kaiser buy it from the Baxters?

EA: It was in the '50s.

RM: Do you remember when it shut down, about?

EA: In the early '60s.

RM: Were there a lot of nonworking at the Kaiser mine?

EA: No. Probably not over 20, 25 at the most.

RM: And the housing for them was out at the mine?

EA: Right. They had a bunkhouse set up, and a recreation deal and several houses for the supervisors, and they lived right there. It was a nice little mine camp.

RM: Is there still ore there?

EA: There's still ore there but it'd be pretty hard to get out.

RM: Yes, fluorspar's really bad to mine now. Was it open pit or underground?

EA: Underground.

RM: So then you came to Gabbs. How did you hear about it?

EA: I just went down to the unemployment office and said, "I'm looking for a job for the winter." And they said, they need people out at Gabbs."

RM: What did you think when you came into Gabbs in '51?

EA: Well, I'll tell you the funny thing about this. A couple years before that, my wife had a brother working in Hawthorne. We went over and picked him up and came back around through here [Gabbs] and drove through in about '48 or so and this was practically a ghost town. We drove around and there were no trees, no nothing, and we kind of shook our heads. We never realized that in about 3 years we would be living there.

RM: That's funny.

EA: When we first came out here there were quite a few houses, but it wasn't too easy to get into one of them. So we lived at the Sierra Magnesite camp for about 6 months - that's up, where the bulk plant is now.

RM: Where's the bulk plant?

EA: They had a laboratory there and a mess hall and houses.

RM: Sierra Magnesite was a separate operation from Basic Magnesium, wasn't it?

EA: Right.

RM: What were they doing there?

EA: They had underground works - they had drifts and stopes and a crushing plant and loading bins there. (They mined magnesite there.) Now that's all been mined; the whole mountain is gone. You can see in some of the faces where their stopes were. I went in to repair equipment after Basic took it over.

RM: And you came here as a mechanic because had had experience with aircraft?

EA: Well yes. Technically, you know, you follow instructions, read blueprints and all that. That's one of the things they train you to do. So that helped. Then I started getting the breaks and I just went right on up.

RM: Did you get drafted or you were in the service?

EA: I got drafted.

RM: They took you from your mechanics job?

EA: Yes. what happened was that I left my draft board in Fallon and then when I went home for Christmas vacation . . . I wasn't supposed to go to the army with the job I had, you see. But the old gal at the draft board called up and said, "Come down here. Sit down," and automatically drafted me into the army.

RM: As a punishment for . . . ?

EA: She claimed that I hadn't been sending in a change of address. Well, I had been. But I was going to go anyhow, so I didn't argue with them. [After] years of thinking about it, I think it was a setup deal. My brother was already on the draft list to go. Anyhow, I went home and got my induction notice from her. She never talked to the draft board or anything.

RM: It was her doing?

EA: Yes. So I went back to Consolidated in San Diego and I said,
I've got to quit."
They said, "You can't quit."
I said, "Well, I'm drafted into the army."

They said, "No you ain't." So they stopped the draft deal. They said, "Now you transfer your draft board down to San Diego. The job you've got would take us too long to train another man."

But I didn't change it. Thirty days later I was on my way.

RM: You didn't change it?

EA: No. It was impossible for a civilian to get by in San Diego then. If you just worked and went home and this or that [it was OK], but if you went anywhere and you ran into the sailors and marines they'd give you a bad time: "Hey buddy, when you trading it in on a uniform?" And then you figured on getting it anyhow. So that was one of the reasons I was going in anyhow.

RM: Yes. They were just giving you a bad time?

EA: They gave everybody a bad time. It's a wonder they had anybody who kept working in the defense plants there.

RM: What was your job in San Diego?

EA: It was engines and air frames.

RM: Were you building them?

EA: Assembling them. Then the last 6 months I was with flight in-service. That's going with them on the first and second flights to make sure everything's working.

RM: So you knew a lot about the planes, didn't you?

EA: Oh, that's it. When I went to work there it was before the war, and we were working on what they called LB-30s. [What had happened was], France ordered 30 of the B-24s and the only place they were being made was in San Diego. Well, France fell to the Germans and so then they came out with a loan to Britain They called them "loan to Britain" - LB -and there were 30 of them.

RM: Oh, so that's how they got the name, but they were B-24s.

EA: Right. And they didn't look a lot different [than the later ones]. The nacelle around the engines were round on them; when they improved the models they got that kind of oval shape and bigger engines and better armament and everything.

RM: How did you happen to get there before the war?

EA: That was when the government sent me down to the aircraft school. That was automatic - if you didn't get a job down there, they had the finger on you and the army would train you. So you had two choices, either work in a civilian outfit or go to the army.

RM: So it was really the draft board that did it?

EA: Well, not the draft board. The state and the government were involved in this rehabilitation.

RM: Oh, I see, when you hurt your knees.

EA: Yes. It was a good deal, too. I probably learned more working at Consolidated quicker than I would if I'd been in the air force at that time, because they didn't have any heavy bombers at all. They just had a few B-17s before the war.

RM: So the B-24 was made by Consolidated in San Diego, and was that the only place it was made?

EA: At that time, right. They made the PBVs - the flying boats - too, at that plant.

RM: So you really knew a lot about these B-24s?

EA: Yes, you worked on everything on them. You helped with different sections when the frames came. When the fuselage came in, you knew how to line that all up, put the wings on, put the bullet-proof fuel tanks in, guns, engines . . . you had to do the whole thing.

RM: And then when they test flew them you were in there to kind of troubleshoot it?

EA: Not on the LB-30. It was about the last 6 months when they were in the later, newer models, and they were taking them out for about 3 or 4 days. They had to have extra help then.

RM: But they were B-24s?

EA: Yes.

RM: So it was B-24s all the way for you down there? You acquired a lot of really good skills working there, didn't you?

EA: Well that's it - you learned how to read precision instruments, how to take good measurements . . . they had to be exact because when you got through with something here came the company inspector and he stamped the deal, and then came the government inspector who stamped over him. So you had your initials signed here.

RM: They knew who screwed up if it was . . .

EA: [chuckles] Yes, you were done.

RM: When did you finally go into the army then?

EA: Well, by the time we got back to Fort Sill it was about in February of 1943.

RM: And what did you do in the army?

EA: Now this is a sad story. It's an army mixup. I figured with my aircraft training I'd go right in the air corps. So what happened? I went to Salt Lake City to Camp Douglas and they had a table like this and everybody who was 6 feet tall and looked like he weighed 170 pounds was walked up on that table. They had a doctor sitting there, and he looked at your feet and knees and this and that, and he'd stamp this person suitable for MP duty. I wondered what the heck NP was and some of the guys were all in a bunch. Finally we asked, "What's this MP business?"

"Well, you fellows are going to Washington, D.C. You're going to be select NPs for guard duty in Washington, D.C., for the war. You've all got to be 6 foot tall and weigh 170 pounds so you can handle any kind of trouble, and you'll be highly trained."

Boy, Washington, D.C.! We didn't argue about going anywhere. So we took off and we headed in the direction of Washington, D.C., all right. One evening we were in Kansas City, Missouri, and we got off the train there and got back on and pretty soon we went to bed. The next morning we woke up on a siding and looked out and we were in Lawton, Oklahoma. And there were all kinds of recruits there. Somebody hollered, "Hey, where do they train these MPs?"

And there was a fellow there in an old cavalry outfit with the regular hat, puttees, and the flared pants, swagger stick . . . a sergeant with about 9 stripes. He said, "All you Ws fall in on me. I'll show you where we train the MPs." So we got on the bus and went through the main part of the fort. Out on the edge in the distance we could see these big galvanized buildings. As we got closer, we could see they were full of baled hay. We went around them, and here were about 500 mules. He said, "All right boys. I want to introduce you to mule-pack artillery."

RM: No kidding. And what exactly did they do?

EA: You've probably seen these little howitzers that the marines have with a barrel about this long - a little rubber-tired cannon.

BM: Yes.

EA: Well, the mule-pack artillery used the same thing, a 75mm pack howitzer, but they had iron wheels because rubber-tired wheels didn't mount on the pack saddles. It took 6 mules to pack the howitzer. Your cannoneers and gunners and that were high school graduates. The mule skinnners were boys out of Alabama, Kentucky, and down in that country. And they knew miles. We had to work with them and all that, but those guys from the South were the best soldiers I ever saw. They were big guys, too.

RM: So you went into the mule-pack artillery?

EA: Yes. They didn't even pay any attention to my aircraft experience.

RM: Is that right? So then you got training in that?

EA: Yes, we got training. The thing is, the regular infantry marches at about 3.2 to 3.5 miles an hour, so a mule pack has to go an average of 5 miles an hour. In a 30-mile march, you get to doing that as standard procedure.

RM: Is that right? You can't walk that fast, can you - 5 miles an hour?

EA: You bet. [chuckles] You learn to stretch out. The way it works, a mule skinner has the reins or the strap for the mule and he never looks back. If he looks back the mule stops.

RM: The mule knows that he looks back?

EA: Yes.

RM: No kidding.

EA: The mule skinner is walking too. You walk right at the mule's flank and you can either use your thumb or have a little piece of wood with a dull point on it and if the mule starts slowing up you gig him a little bit.

RM: And what's the mule skinner carrying?

EA: He's just carrying the reins. The mule sets his gait; he'll walk 5 miles an hour. As a matter of fact, he'll walk more than that because you stopped every hour for a little bit to rest the mule.

RM: And what's the mule's load?

EA: The gun is broke down into 6 pieces - the barrel and the wheels and the trailing pieces and all of that. And these mules got trained so well that when you loaded them they'd be in a circle, with the gun in the middle. It took 6 of them to haul just the howitzer. Then you had many of them hauling ammunition and food, supplies and all that other good stuff.

RM: And there was one skinner for each mule?

EA: Right.

RM: And then a guy by his flank?

EA: Yes. There were 5 men generally on the howitzer, so they had plenty of the guys for flank guys.

RM: And you walked at a 5-mile-an-hour pace?

EA: Yes. On 30-mile marches they wanted us to go 5 miles an hour. RM: Boy, you had to be in good condition, didn't you?

EA: That's it. Talking about condition, when we were through with the last 30-mile march we went on, the sergeant kind of told us, "Now, sometime through the night, you guys are going to have visitors." You see, they trained rangers there at Fort Sill, too. One of their deals was the ambush. When the pack howitzer guys were all trained and they were trained, they had to ambush them or raid them.

So we figured what was up; we'd heard about these things. It was pretty rough. If you were in your pup tents they did a lot of damage -they'd knock them down and then tumble you around. So we had our guys stationed way out. They got off their trucks 4 or 5 miles away, but we had guys away down the only road coming in there, so we ambushed them. And there were whistles a-blowing and everything. Some guys got hurt Pretty badly.

RM: What did you do when you finished your training?

EA: They took us to a mess hall and they said, "They need you guys in the Pacific right now. You'll get your battle gear tonight; you'll be on Your way the next day." And everybody was getting 7 days at home, you know, after they finished their training. Some headed for California, then Pittsburgh, then Camp Stoneman. Then we got on a liberty ship, the John Lykes, which had been at Dutch Harbor and had been kind of bombed -it had a list. Our convoy was one 4-stack destroyer and this liberty ship. It took us 30 days to get to New Caledonia. And it was spooky. We had to refuel the destroyer from the liberty ship and everybody was on deck with their life belts, with no ships in sight or anything. We were sitting ducks because we just weren't moving.

RM: For a Japanese sub?

EA: Right. But we made it. So then we went to the Solomons. Well, the mules were there ahead of us.

RM: The same mules?

EA: Oh no. Different ones. But there was no dry food for them. They were trying to eat on that jungle foliage and they got diarrhea. So they decided, "Well, they ain't no good here," so they shipped them back. Then they went somewhere and got some rope about like that and they braided sticks of them. They said, "Well, you guys are going to have to pull them around to . . ." (where you've got to go).

RM: Good lord.

EA: Well, those iron wheels they use . . . this was funny. Here we were along a trail pulling the damn howitzer and here came the marines with their jeeps and all, pulling their howitzers with rubber tires. They eyeballed that a little bit and the army decided we were more worthless than the mules.

So they shipped us back to New Caledonia for reassignment. And you had to go over to target practice every day. Well, most of the mule skimmers - those old Kentucky, Tennessee, Alabama fellows - got pretty near perfect scores the first day they shot. So the next morning they were on their way to New Britain or New Georgia or something.

RM: The Southerners?

EA: Yes. They got pretty near all them the first whack. That might have been another deal, too - they needed infantry guys and they looked in their records and saw that they were all expert [sharpshooters].

I was doing something else and I didn't get to shoot till about the third day and I had it figured out very well, then. I knew damn well I was waiting for something to happen besides going to the infantry from the pack artillery. So I kind of shot the corners off my target. The second lieutenant said, "You know, the position you're in and the way you're holding that rifle and everything, I can't understand why you can't hit in the bull's-eye or something." But I knew my time was coming.

An air force major showed up looking for anybody who had any aircraft experience. I went and talked to him and he said, "Jesus Christ, where in the hell you been?" The next day I was on a boat going to the Fiji Islands. But I didn't get into a bomber outfit till I got into a fighter [squadron] [where they flew] P-39s. They were a different type of engine and everything.

RM: Was that the Aira Cobra?

EA: Yes.

RM: They trained them in Tonopah for that.

EA: Right. This squadron - the 68th Fighter Squadron - was one of the first squadrons in the Pacific. As a matter of fact, when Yamamoto was shot down, one of their pilots shot him down out of Guadalcanal, up by Bougainville.

RM: Was he the admiral of the Japanese fleet?

EA: Yes. But this was later on. When they shot him down they were flying P-38s.

RM: So you stayed with the P-39s then till . . .

EA: Until we went to Bougainville, then we traded them in for P-38s.

RM: That was the old double . .

EA: . . . twin boom . . .

RM: Was that a good plane?

EA: It was a deadly plane if they could get up high. Boy, they came down like a hawk, and the 5 guns on them . . . anything that got in front of them and they got a whack at, they just blew all to pieces.

RM: Is that right? But they had to come down on something?

EA: Yes. They couldn't maneuver tight enough in the lower altitudes. The Japs didn't want to get into that high altitude, either. They wanted to do most of their maneuvering at about 20,000 feet because they had heavier air and everything right about there. They took quite awhile to make the P-38s. The Japs would turn on the inside of them . . .

RM: Did you stay there till the war was over?

EA: Yes.

RM: And then they shipped you back.

EA: Yes, we left from Leyte . . . we were down at Palawan when the war ended.

RM: Where was Palawan?

EA: That was a prison island where they had the big Philippine prison.

CHAPTER TWO

RM: How long did you spend in the South Pacific?

EA: Thirty months.

RM: Did you like the area - aside from the war, I mean?

EA: No, we . . . boy oh boy. We went from New Caledonia to the Solomons, then to New Guinea, then back up to the Philippines.

RM: You were all over, weren't you?

EA: Yes, we went everywhere. We were what they called a task force squadron. We were in the 13th Air Force, which hardly anybody ever heard of, the 347th group - we had 3 squadrons in that. As soon as the Seabees or the army engineers had a runway laid, we were there. We were there before anything was set up or anything.

RM: Is that right? Did they fly you in?

EA: They'd fly you in or you'd come in with a fast boat.

RM: And your job was to keep those planes running?

EA: Keep them going, patching holes in the . . .

RM: Was it tough to get parts and materials and everything?

EA: In the beginning of the war it was really tough. The original guys were in the battle of Guadalcanal full bore. They went in by submarines with no parts, no nothing. They were pretty well bombed and shelled and . . . that was a real tough one.

RM: But you didn't have that much trouble with parts?

EA: Well, we had our trouble. The main thing was getting planes, a lot of times. It was right at the time the battle was going on in Europe, and they didn't want too damn many planes in the [Pacific] - especially bombers and such.

RM: Then you came back to the states after the war?

EA: Yes.

RM: When did you get back?

EA: In December of '45.

RM: And what was the name of the outfit that you were in over there, again?

EA: The 68th Fighter Squadron of the 347th group of the 13th Air Force. We had one of the top aces in our squadron - Lieutenant Colonel Robert B. Westbrook. They made one mistake. They'd been down to Singapore or somewhere and coming back they saw these Jap fishing boats. There were 4 planes, and they went down to strafe them. They said one guy stood up with a rifle and must have got him right through the head or something. RM: So you lost the ace.

EA: Yes. We had lots of aces but he was the top. He had 20-some planes.

RM: Wow. When you came back were you expecting a career in the aircraft industry?

EA: Well, I had a military leave of absence from Consolidated, so I went back down there to take a look, and they were on strike and San Diego had got too big to suit me. So I decided to come back to Nevada and go into the mining business.

RM: Is that right? So in '51 you found yourself in Gabbs?

EA: Yes.

RM: And you say you started off living up at Sierra Magnesite's housing. How long did you live there?

Tina Alworth: Six months.

RM: But you were working for Basic?

EA: Right.

RM: Could you describe what your job was with Basic?

EA: For a little short while they needed an oiler - that's someone w1 lubricates all the machinery. I figured, "FOr the winter that's fine." I worked as an oiler for about 2 months and I'd stand around and watch the guys and tell them, "Well, you do it . . ." this way or that way, you know. So they said, "Well, you sure ain't an oiler." [chuckles]

Then I went into the diesel shop for a while. I was on the diesel engines and the transmissions and all that. Then they eliminated the contractor working in the briquette plant over something. They took everybody out of the diesel shop and put them into plant maintenance and I worked there for about 6 months. I was supposed to go back in the diesel shop but they said, "No, we need you in plant maintenance."

RM: What kind of equipment were you working on in the diesel shop?

EA: It was Caterpillars, Euclid trucks, 2 sizes of shovels and that type of thing.

RM: So you were just working on anything that needed fixing?

EA: Right. You can read an instruction book and it's all right there.

RM: The trucks were a lot smaller than they are now, weren't they?

Eh: Yes, at that time the Euclids hauled about 13 yards and that was considered immense. Everybody thought they were a big truck. (They had 8 or 9 of them.) Quite awhile after I left the shop they came on with the 35-yard trucks.

RM: And they were just humongous, weren't they?

EA: Yes, and now they're small. [chuckles]

RM: Were they pretty reliable?

EA They were pretty reliable except the brakes. For a flat quarry area it'd be fine, but when you're caning down the 9-, 10- or better-percent grade, they had to have hydrotarders on them.

RM: What are they?

EA: That's a water wheel they put on the drive line.

RM: It pumps it up?

EA: Yes, they pump it and it makes this pressure and the pressure would act as a brake. It pumped to beat heck, but they had valves to shut the water off. The brakes were way too narrow for the type of grades they have here.

RM: So you were constantly replacing brakes?

EA: Well, constantly replacing hydrotarders. [chuckles] They didn't trust their brakes at all. They used water with a soluble oil in them, but they cavitated awfully fast.

RM: What does "cavitated" mean?

EA: Well, the water just wore the veins out on those big impellers. Then they tried electric brakes. They took the place of the hydrotarder on the drive line, but it was like a big generator. And they were generating this power and that energy was dissipated as heat.

RM: Oh. The drive shaft was turning a generator, in effect, and then that was acting as a brake on it?

EA: Yes.

RM: I'll be darned. So you worked on the 13-yard Eucs?

EA: Right.

RM: You weren't there when they had the 35s?

EA: No.

RM: Did they have any other kinds of trucks?

EA: Oh, they had flatbed trucks - small dump trucks around the mill -generally Fords and Chevrolets and like that. And an old Mac or two at that time.

RM: And that kind of shovels did they have?

EA: TI shovels were all by Bucyrus-Erie. First they had the 37-Bs, then they went to 54-Bs.

RM: How big a bucket did they have?

EA: The 54-B had a 4-1/2-yard bucket and the Bucyrus-Erie's 37-B was a 2-1/2 yard bucket. But now they've got the big hydraulic loading deals RM: Was there any other kind of equipment that you worked on at that time?

EA: Well, motor patrols, the old-fashioned ones.

RM: How many yards a day were they moving up there?

EA: Never less than 10,000 tons a day.

RM: They were moving that much?

EA: Actually-more than that - that was ore. Sometimes they'd bring down that much ore. Probably when they started it wasn't that much. I'm thinking about the later days. They just had one rotary kiln going at that time.

RM: How did they break the ore?

EA: It's an open-pit mine and there were big benches. They drilled them with wagon drills and they loaded them, at that time, with dynamite.

RM: How big were the holes?

EA: About 3 inches.

RM: How deep were they?

EA: Oh, not over about 20 feet. They had to be real careful on the ore grade. Every hole had to be sampled and the samples kept. It was a big job in the lab keeping track of it. Then they'd make a pattern deal all colored up and blast it. And they'd try to blast it so it just lifted -the ore bowed up and down, then they'd flag where the ore was because it all looked the same.

RM: What exactly is a wagon drill?

EA: The old wagon drills had a mast, then a piece of . . . you've seen pavement breakers - jackhammers?

RM: Yes.

EA: Well, this is a 'movable deal. The chain deal would run up and down this mast and it had air motors on there; they put pressure on it to . . .

RM: So it was a hammer; it hammered it down.

EA: Yes, an air hammer.

RM: Just like a jackleg or something.

EA: Right. They did away with them a long time ago and they went to air tracks. Now they've got deals that look like Caterpillars, the big, big, air tracks, I call them.

RM: Yes, up at Round Mountain they put down an 8-inch hole. They put down a 40-foot hole in 10 minutes if the ground's not too hard.

EA: [chuckles] Yes.

RM: But they were blasting with dynamite at that time?

EA: Yes. That was all ammonia nitrate back then - special boosters.

RM: Did they have a large number of shovels?

EA: No, the most shovels they ever had were the 2, 54-Bs and a 37-B and they had a P & H 4-1/2 yard but it wasn't a success. They had a 44-B Bucyrus-Erie and it didn't work out.

RM: How much ore were they moving a day when you were at this phase?

EA: When I first started they were doing a lot of stripping. They had to be moving a lot because they averaged over the years 1-1/2 million, 2 million tons a year.

RM: Is that right?

EA: Yes. Not ore, that's rock. The stripping ratio's probably 3 to 1 or 4 to 1 there. If they brought 4800 tons to the mill, then there were 17,200 tons moved that day.

RM: So then it wasn't too long until they transferred you over to the plant. Could you talk a little bit about the process the ore went through in the job?

EA: Originally they just had the one rotary kiln.

RM: Now, what is a rotary kiln?

EA: You've seen a cement plant?

RM: Yes.

EA: Well, that long tube is a rotary kiln - it's a long tube that turns, and they heat it in there. But they have to heat the magnesite several hundred degrees hotter than they do cement. It's a dead burn.

RM: What does that mean - "dead burn"?

EA: When the ore comes in, the specific gravity is around 3, I think. Two hundred tons of it would go into the rotary kiln in raw feed. When it comes out the 200 tons of raw feed now weights 80 tons of finished clinker. In a dead burn they run all the gases out of it and all the moisture out of the rock and they make a dense clinker out of it.

RM: So a ton of ore would yield how much dead burn?

EA: Less than 50 percent.

RM: No kidding - that little? And it's all in the moisture and the gases?

EA: Most of it's the gas. The gas is a CO₂. Tons and tons of that go up the stack.

RM: Is that right?

EA: You see, the [formation of] brucite [involves] crystallization of H₂O, which comes out as water, but in the magnesite it's partly CO₂.

RM: There are 2 ores - brucite and magnesite - aren't there?

EA: Right.

RM: What is the difference?

EA: It's just in the chemical formulation.

RM: Do they look different?

EA: Oh yes. The brucite is a light-colored rock.

RM: What color is it?

EA: It's kind of an off-white, most of it, and it's kind of pearly. It can look just like the magnesite, too, but generally the high-grade is lighter colored.

RM: What do they use the brucite for now?

EA: Brucite is used in ceramics and it can be used for metal too, but now...only certain customers buy it. They make a material out of it that just won't wear out.

RM: It's like a ceramic?

EA: Yes. They take the brucite and get it molten in big induction furnaces. In they pour it in these forms and they have steel clips in there so they can weld it to chutes and things. It's an expensive material - Cohart's the name of it. It just refuses to wear out. It just gets slick and . . .

RM: So they use it in chutes and . . .

EA: Yes, and a lot of it goes into ceramics.

RM: But originally they were using the brucite in firebrick, weren't they?

EA: Yes. I have an idea it had to be your real high-grade, because this is the only place in the world, I think, where you can get brucite now. And they don't sell it to everybody. They've got their old customers . . . somebody down in Texas has been taking truckloads down there. They take it uncrushed or anything - boulders and all. I don't know what they're using it for. I asked a truck driver, "What are they using it for?"

He said, "I take it down there and I dump it and they get me off the property." So I don't know what they do with it.

RM: And what does the magnesite look like?

EA: It looked just like plain gray limestone. That's the problem, you can't tell it [from limestone].

RM: What is the country rock up there?

EA: Most of its dolomite.

RM: What is the magnesite used for?

EA: The big thing when I started was in refractories for the steel industry.

RM: And what does that mean?

EA: That's the lining for the open-hearth steel furnaces. They made brick out of some of it. Then after the bricks they built all the open-hearth furnaces. Then they went in with the clinker and they put a layer of that in there a foot deep all over to protect the brick. If a hole would start going into where the brick was, they had special guns that blew this stuff in - what they call a special refractories product They make that up here, too. It's got a little silica and other stuff in it so that when it goes in there it fluxes.

RM And they still do that?

EA: Yes.

RM: What was it they were taking to Henderson - brucite or magnesite? EA: Magnesite.

RM: And they both contain high levels of magnesium, right?

EA: Right.

[Tape is turned off for a while.]

RM: Ed has shown me a little cylindrically shaped thing. It's about 8 inches long and about 1-1/2 inches in diameter; it's magnesium that was made at Henderson. And it is really interesting to hold because it's so light. It's shockingly light, really.

EA: It used to be about that long. I've cut samples off for people. Anyhow, the history on this operation [started when] Howard Eells, Jr., [the president of Basic Refractories], heard about the brucite in the Gabbs area.

RM: Who originally discovered it?

EA: Harry Springer and a couple of other old-timers. There was also a tungsten mine operating up there, but I don't know who operated it. That's why they call that one gulch going up Tungsten Gulch. But this Howard Eells flew in from Reno to that flat down by Luning in 1935. There was nothing but a dirt trail coming in here at this time. These old prospectors were living in the brucite camp and there was a spring up there. Some of the old cabins those old fellows lived in are still up there.

RM: And that's up in the mine workings area? Does that mountain have a name?

EA: No. It's in the Paradise Range. Anyhow, he made a deal with them to sell and lease some of the claims. They started mining the brucite and they hand sorted it. They'd just mine it - they had a 10-B Bucyrus-Erie, about a 3/8 bucket and some small dump trucks, and they just dumped it out on the flat. They had some old dumpster buckets and they dumped these bucket loads of rock around and they had people hand sorting it.

Some way or another before the war Eells researched magnesium metal, I guess, and he kind of tied up an English patent on making magnesium out of magnesite. The government needed magnesium, so they got together with Basic and Eells and they developed this idea.

He was telling us one time about it - they knew that there'd be a big land grab in Las Vegas if they told them where they were going to put this tremendous plant. So he said they went across the valley, little knowing that they weren't too far from where the Strip was, and made like they were surveying out a complex for a big plant, and all these promoters went down there and grabbed all the land they could around it. In the meantime, they secretly developed the location where Henderson is now because it's closer to the power.

RM: That's fascinating. Whereabouts were they laying out the . . . ?

EA: It was somewhere to the west of the Strip. He said they had a big surveying crew out there making a big show. That's why the school and a lot of things down in Henderson were called Basic - after Basic Refractories.

So anyhow, they built it. To begin with they were going to ship the concentrates from here by train down there. But it was a hell of a roundabout way from . . .

RM: Oh yes. They'd have to go what, to Luning and then up to . .

EA: Yes, then way down to catch the . . .

RM: And then come down the Union Pacific from Salt Lake.

EA: Yes. So that wasn't working out on account of all the other military traffic. They went that way for a while, then Howard Wells, the Wells Cargo Trucking outfit, who was a good friend of Mr. Eells, I guess promoted that they get a fleet of trucks. Well, they got them. I've seen pictures of that string of trucks lined up. Boy, it was like a freight train. So they started hauling

the concentrates down to Henderson. And they had a tremendous float plant set up here upgrading the ore, and roasters and vacuum pumps and so on. Most of that was gone when I came.

RM: They weren't processing the ore in the same way when you got here?

EA: No.

RM: What were they doing with the ore when you got here?

EA: They were just making a dead burn clinker. They had one rotary kiln and they were using a wet process. They could only make maybe 70 tons a day of product and it was a money-losing proposition. It had clinkered up in the kilns so badly that they had to shoot, sometimes, 24 hours a day with kiln guns to knock the rings out of the kiln

RM: Is that right? What does a kiln gun look like?

EA: Oh, the ones they used (Winchester and Remington both make them) are a real heavy duty shotgun. They've got a heavy duty breach; they load them by hand. The shell looks like a shotgun shell. They use an 8-gauge lead slug.

RM: And that's to break the clinkers out of there?

EA: Yes. They'd knock the big chunks and balls that got rolling around in there. And then one time Basic built a 4-gauge gun. A Max Mueller from Switzerland worked for Basic in the early days when he was going to college. Well, he went to Switzerland and got an idea off the Lugers and he had one built that had the Luger action and fired 4-gauge.

RM: Now 4-gauge is bigger, isn't it?

EA: Right. And that was air operated.

RM: But it didn't damage the kiln?

EA: Well, it shot the end out of the dust chamber if you didn't [chuckles] hit the boulder.

RM: Did the shot ricochet in there?

EA: It bounced around.

RM: How big was the kiln?

EA: This one was 390 feet long and 9-1/2 feet in diameter.

RM: What did they use to heat it with?

EA: To begin with they heated with coal, then they went to bunker oil, then they went to natural gas, then back to bunker oil and back to coal. They'd go any 3 of those ways.

RM: Is the fire under it?

EA: No. For instance, when they're burning coal they have a coal mill there, which pulverized it so it's just like flour. A big fan blows a blast of air and pulverized coal and it burns just like . . .

RM: Oh, it blows it inside the kiln.

EA: Yes. And they fire it up by just holding a mass of rags soaked in diesel oil and that pulverized coal burns just like oil or gas.

RM: I see. And how long were they charged?

EA: It's a continuous feed.

RM: How do you make sure that what you've got coming out is finished?

EA: It's a matter of porosity.

RM: Which means . . . ?

EA: It's the density of the material. They have scales and I never did quite . . . they dip it in wax for some reason and that's the test.

RM: Does the ore go in one end and came out the other as clinkers?

EA: Yes.

RM: How long did it take it to go through?

EA: It takes a couple of hours - that thing only turns real slowly. That's basically what the processing plant was, just the big kiln and . . .

RM: Did it operate 24 hours a day?

EA: Any of these things - the Herreshoff furnaces and the kilns with the high heat - once they fire them up, until they break down, run 24 hours a day.

RM: Holidays and everything?

EA: Right. You rover shut down unless it breaks down.

CHAPTER THREE

RM: What is a Herreshoff furnace?

EA: A Herreshoff furnace is a vertical furnace with 14 hearths in it. It has a central shaft with arms on it with rabble teeth on it - they call them rabble arms - and the ore comes in the top. One set of arms moves it to the outside of the hearth and it drops down to the next hearth, then that set of arms moves it to the center of the shaft and it drops down to another hearth and back and forth.

RM: Oh. It works its way down?

EA: Right. And you have either bunker oil heat or natural gas up on each hearth.

RM: So basically it's a vertical kiln, in effect?

EA: Yes.

RM: Does it also turn the ore into clinkers?

EA: No. It's turned into a "light burn." This is what they call a magox product up on the hill. It's a high-grade . . . as a matter of fact, it's used in many, many, many things: the chemical industry, the animal food industry, Epson salts, soil stabilization, sugar refineries, rubber . . . there's a list of things a mile long that it's used in. The big thing is the feed grade. Back east where the glaciers were there's a very great deficiency of magnesium in all the grains and the water, I guess, and everything. And the cattle and chickens and all that have got to have it.

RM: I see. So their bodies can absorb magnesium in this form. What is it - magnesium oxide?

EA: Yes.

RM: So they turn out magnesium oxide.

EA: Yes, in the Herreshoffs. That's the main product right now. And these trucks come from Georgia and all over. They drive straight up here.

RM: And a lot of it goes into animal feed?

EA: Yes. And then soil stabilization is the same thing. They're trying to upgrade their soil by putting it on. (That's the low-grade stuff.) The freight on it is the thing that kills people. Now, they're shipping magox from China and selling it for \$35 a ton and you can't get it shipped from here back east for that. But the Chinese product is not as high-grade as the magox they make here. But it's the old story - you get in a little argument with these countries and they shut you

off. This is what happened here just a couple of months ago. All of a sudden they've got trucks caning in here ordering thousands of tons, and they had to fire up another furnace.

RM: Because China shut them down?

EA: Well, they just didn't let them load some ships. And that's the way they do it - no ships loaded, no product. I've been doing a little research, studying up on this heavy media deal. I've inherited the library of an old, old-time mining engineer through certain relatives.

RM: Is that right? Engineering books or magazines?

EA: It's his books and his work collections and this and that and it's very, very interesting.

RM: Is there quite a bit about magnesium?

EA: Yes. One I've been studying makes reference to what happened when World War II got started and before - what [this country] was going to have to do, because they had no magnesite here. They were getting it from Austria. Austria was a big exporter - the first exporter to the refractories. They got shut off and boy, the panic. They've forgotten about that now, you see. For instance, there might be one refractory outfit still running in the United States, but I doubt it.

RM: This is the only one?

EA: On brucite. We're making no refractories hardly at all now. It's just special refractories products - SRP, as we call them - in addition to the magox.

RM: Are the SRPs made out of the brucite?

EA: No, this is out of the clinic red - the dead-burn. But that has other ingredients in it, so it's an import here. But the clinker shipments from here used to amount to thousands of tons. We used to ship, like 10,000 tons to Japan or 2000 tons to Mexico and this and that.

RM: Was that in the '50s or the '60s or . . . ?

EA: Fifties and '60s - '60s especially. Then the United States provided the money for modern refractory plants over there - seawater plants and that.

RM: And that hurt you?

EA: Oh yes.

RM: Who are the other big exporters now, in addition to China?

EA: Well, Austria, Greece . . . Greece is also a very big exporter.

RM: Do they have a lot of brucite?

EA: No. The thing in Greece . . . as a matter of fact, some people from the Greek company were here. We had one of the top magnesite experts in the world as a metallurgist here - a man from Denmark. He'd been all over the world and he knew of every type of magnesite there was and where it was. They would send people here to learn from him how to upgrade it. He was showing me a picture of this outfit in Greece. They cut wood for some of the places to make work, to keep everybody happy. They do things by hand that they could do by trucks and Cats. And they use vertical shaft kilns there instead of rotary kilns. They would go into mountainsides where there'd be a cliff-like deal of solid rock. They would mine that out, and they didn't have to use steels for anything. Then they'd fill that up, with rock and charcoal. They cut big charcoal ovens like they did years ago making charcoal, and they'd put this in there and make their clinker that way.

RM: Wow.

EA: It was a big, big, big setup. The Greek government runs the corporation.

RM: I'll be darned. Is this the only place in the country that produces magnesium oxide now?

EA: I don't know about Moss Landing in California.

RM: They had another deposit there?

EA: No, they get it from seawater. Basic has a seawater plant in Port St. Joe, Florida, and something down at Brownsville, Texas. (They got that company after I left.)

RM: Does Basic own Moss Landing?

EA: No, that's Kaiser.

RM: Where is Moss Landing?

EA: It's down in the artichoke country. It's down by San Francisco - go through San Jose and it's right on the ocean.

RM: So when you came here in '51 there was just a kiln?

EA: Right, and the heavy media plant that they'd just finished building.

RM: And what exactly is a heavy media plant?

EA: Well, that plant is set up and they make a solution. They've got a big tank, kind of a cone shape . . . at that time they were using ground-up iron as the media to raise the density of the solution, and they would float the waste off. They set the solution right close to the product. If the product was 2.95 density, then they would bring it right close where anything lighter than that would float, and they would float it off. It was designed for 50 tons and they had a heck of a time getting 50 tons to go through it.

RM: That was 50 tons an hour?

EA: Yes.

RM: What was the product they got out of that process?

EA: It was high-grade raw ore. This was a process for upgrading the raw ore.

RM: Then they would run that through the Herreshoff furnace?

EA: Or the kiln At that time it would have been through the kiln.

RM: Is there any difference in the product you get out of the Herreshoff versus the kiln?

EA: Oh, there's a lot of difference. The kilns produce what they call dead-burn - everything's burned out of it. It's radish - looks just like red lava rock except that it's so damn dense and heavy. But the magox retains its original weight, pretty much They drive off the gases but they don't clinker it.

RM: OK. So the clinkers go into products like liners and that kind of thing, right?

EA: Yes, brick, firebricks and . . .

RM: And the magox - magnesium oxide - goes to chemical and agriculture uses?

EA: Yes. For a while they were using it in these tectum blocks for wood. They shredded the wood - it looked like shredded wheat - and made building material for ceilings and they sprayed this solution of magnesium oxide onto the wood and it fireproofed it - it wouldn't burn. RM: Oh. It's almost a substitute for asbestos, then. Are they still doing that?

EA: Yes. Same company in Canada has got the patent on it. Canada produces a lot of magnesite, too.

RM: When you transferred from working on the diesels into the plant, what kind of things were you working on in the plant?

EA: Well, it was pumps, screw conveyors, crushers, ball mills, elevators - everything they had.

RM: Did they crush the ore down when they put it in the kiln?

EA: Well, at that time it was in a water solution. They pulverized it in wet ball mills, ground it in water and then they went into holding tanks.

RM: I see. So it went into the kiln wet.

EA Yes.

RM: Where did they get their water? Did they pump it in of the valley? EA: Yes, there are 7 hot water wells out here on the flat. All the water in this area, at that time, was about 150 degrees. That's why, they had cooling towers. And it was very bad water, too - around 10 parts per million fluorides and dissolved . . . it's a thermal water. Very, very poor water.

RM: How long did you work in the plant?

EA: I worked in the plant till I retired, but I worked as a mechanic till about '61 or '62 when I was made a supervisor.

RM: What kind of a supervisor were you then?

EA: Over the plant maintenance. Later on I become the master mechanic or maintenance superintendent, so then I had everything.

RM: Trucks and shovels and everything?

EA: Yes. Electricians, sewer water, everything.

RM: How had things changed by 1960 or so?

EA: It was changing [a lot] in '60. They got into floatation and they put in another rotary kiln And in the '60s they bought out Standard Slag, got another rotary kiln and then the HMS plant was running every summer when it wasn't freezing.

RM: And What did that do?

EA: It was upgrading the ore.

RM: Oh, I see. That was that floatation thing.

EA: Yes. The float plant was a 1000-ton-a-day floatation plant.

RM: Had they expanded it?

EA: No, this was a new plant. It was built to take the rock and float out the impurities and then that was blended in . . . they went from feeding the kilns a dry product to a briquette. You have seen charcoal briquettes? Well, the big briquette presses have faces on them and they made a briquette the same size out of the magnesite ore.

RM: You're showing me 3 feet there. And they had briquettes of magnesite?

EA: And they'd dry that - the concentrate from the floatation plant went in the bins, and then they mixed it with the raw ore in blending tanks. Then that was lifted by elevators into a pug mill and they added water and acid to the right amount of moisture and then it went through briquette presses and drying ovens and made a hard briquette. Then that's what they fed into the kiln

RM: Why did they go to all that trouble, whereas before they'd just been putting it in wet?

EA: With real high-grade ore you could pit it in raw. But when they had to use floatation to upgrade the ore they had to find a product - they had to get bound up some way. And it was easier in these blending tanks to upgrade it - take the lime out. They had different stockpiles. If they needed a little more to bring it up to a [grade they would] grind an A rock or a B rock. That's where they made their name - they had a product that was A-1 all the time. As a matter of fact, when Combustion Engineering bought out Basic they did away with a picture of a guy shoveling clinker and the guys in the steel mills wouldn't use the stuff. They had to put the guy shoveling clinker back on the bag.

RM: Is that right? When did Combustion Engineering buy the plant? EA: I think it was around about '78.

RM: Why did Basic sell it?

EA: Well, it was one of these things. They just raised the price so high that they'd have been foolish not to take it. And Mr. Eells was getting old - it was a family-held deal - and he was getting way up there in age.

RM: I see. So they just sold it? And now Basic is not owned by that family anymore?

EA: No, but the name is back to Basic Refractories now.

RM: Did the Eells family buy it back?

EA: No, they're just using the name. Premier Refractories is involved and CE (Combustion Engineering) is still involved. But Combustion Engineering was bought out by a Swiss conglomerate.

RM: Which was named . . . ?

EA: ABB or something. And they're a great big organization. It had to be big - Combustion Engineering had about 40-some thousand employees alone.

RM: Is that right?

EA: It was a big engineering fine. They were big on nuclear power plants, all kinds of nuclear operations.

RM: When you came here in '51 how many employees were up there?

EA: Probably it was about 100; they had 30 on the labor crew alone at that time.

RM: What did the labor crew do?

EA: They were cleaning up a lot of stuff left from the war. They were pretty near all Mexicans. They lived in the brucite camp east of North Gabbs 1-1/2 miles, where they had a mess hall and.

RM: Oh, they were single men? All wetbacks.

RM: They were probably working cheap?

EA: No, they worked for full wages. And one Mexican was the chief. He collected their checks and it was the old standard ripoff. He knew what to do. They all had 14 kids, you know, and that - even guys 19 years old. Immigration finally cleaned that out.

RM: And what were they cleaning up?

EA: All the old buildings and things that were left from the government operation. They were doing that kind of work for several years.

RM: When they got rid of them, did the work force drop?

EA: Quite a lot, because their labor crew after that was about 7 or 8 people.

RM: How many people were working there by 1960?

EA: It was probably up to a couple hundred - the highest it was 315.

RM: And when was that?

EA: That would have been about '78, '79. That's when everything was running - 3 rotary kilns and 3 Herreshoff furnaces and the heavy media plant . . .

RM: And what do you think it is now up there?

EA: Less than 100.

RM: Why is it so low when there's all this demand?

EA: They can't net the freight out of here. They took the railroad out of Luning.

RM: Oh. And that really hurt the place?

EA: Well, it was hurt before they took the railroad out. The freight on it was just too high, and it and has been for quite a while.

RM: For 10 years or so?

EA: Yes. They can ship it in cheaper from overseas. For instance, the Greeks say, "Well, we can bring refractories from Greece and we take coal back. We've got to come get the coal anyhow, and it's just ballast." It only costs than \$2 or \$3 a ton, and it's practically the same thing with all that stuff. Of course, I don't know what's going to happen if they cut down the coal fields back east. That might change the picture too. RM: So basically there's a market, but the freight is really hurting the plant now?

EA: Yes.

RM: So production is down?

EA: Oh yes. One of the rotary kilns hasn't run . . . well, as a matter of fact, the kiln they got from Standard Slag is off of the tax roll. They've cut the power and water and everything to it. It'll never fire up again. And the number one kiln - that's the big long one - I don't think will probably fire up. They're supposed to fire up the newer one (it's still pretty old) in a couple of weeks. It's emergency start-up, too. Quite a lot of work's got to be done; they weren't figuring on this Chinese situation, you see.

RM: What about the Herreshoffs - how many of those are they working?

EA: They're working 2 of them now. We've got another - the newer one is on standby yet. The whole problem is with the grinding. They've got to air-separate this stuff after they grind it, because a lot of these products are 400 mesh. That's just like talcum powder, practically RM: Is that the finished product?

EA: Yes, it's finished at that.

RM How do they get their product out of there?

EA: Trucks.

RM: Do the trucks take it clear to the destination?

EA: Pretty near all of them. A lot them are these big feed companies -they have their own trucks and they send them in. But most of them are gypos. They just call up a dispatcher and they send them to go get a load here or there. They bring a load from back east and . .

RM: Does any of it go to a railhead at all?

EA: Yes, they've got a railhead up at Battle Mountain.

RM: Is that the nearest railhead now?

EA: No, the nearest one's in Fallon. They're trying to make a deal with Fallon to put in a railhead deal there and that might go through. That's a lot closer. But the outfit hauling the ore to Battle Mountain is doing it pretty near as cheaply as they hauled it from here to Luning.

RM: Is that right? How do they do that?

EA: Well, it was a Wells Cargo deal yet. They were real buddies with Eells.

RM: Oh, I see. So now this new guy is not charging as much?

EA: Right. But they're not getting the service though that they got out of Wells Cargo. They mix up the cars that go and all that.

RM: When you became superintendent of mechanics, what kind of trucks were you using?

EA: There were still a few of the smaller trucks, but then we got started replacing them with 35-tonners.

RM: Eucs?

EA: We had Euclids, Caterpillars and Haul-Paks and Darts.

RM: You didn't stick with one brand, did you?

EA: No. They went with whoever they could get the best deal from, which was a bad mistake. The Darts, for instance, didn't work out too well and some of the Haul-Paks didn't work.

RM: Who makes Haul-Paks?

EA: That was the Haul-Pak Company.

RM: And then the Darts were made by . .

EA: . . . the Dart Company.

RM: Eucs are made by General Motors, aren't they?

EA: They are now. Euclid was a company of its own, too, at that time.

RM: What kind of shovels were they using then?

EA: They were still Bucyrus-Eries. They were using the shovel, and then they came in with the 988 Cat front-end loaders. And then they came in with an O-K German track layer - a big loader with about a 7-yard bucket on it.

RM: How many mechanics were working under you by the time you were superintendent?

EA: The highest crew I had altogether was about 110 or 112. That included mechanics, electricians, diesel mechanics . .

RM: And that was when they were working 350 people up there?

EA: Yes.

RM: So about a third of them were repair and mechanics?

EA: Yes, in 3 shifts.

RM: And you were in charge of all that?

EA: Yes, along with the water and sewer and everything.

RM: The water and sewer down in the town - the company owned that, didn't they?

EA: Yes. We had everything.

RM: Was it tough to manage the water and sewer?

EA: It was interesting - especially the old water lines. In the summertime what was bad was the redwood tanks leaking. You'd have to run around 2 or 3 times a night and switch water from here to there and this and that.

RM: Where were the redwood tanks?

EA: They were right east of here up on the hillside.

RM: Were they pressure tanks?

EA: No, just steady-head tanks. 1 water would get so hot down here, even with the cooling tower, that you had to stand back to take a shower. A hundred fifteen degrees is kind of . . .

RM: Even with the cooling tower it was 115?

EA: Yes.

RM: So it wasn't until lately that people here really had cold water, was it?

EA: Just last summer.

RM: What was it like, living with that hot water all of the time?

EA: You had to be careful in the summertime, especially people with little kids And it made it bad trying to raise a garden or anything it would cook your grass.

RM: Did anybody ever think about using it to heat the homes here? EA: As a matter of fact, the state did a whole study on it. It's all on record what to do . . . and I thought about it. I tried to buy the lot down below me here. They drilled about 50 thermal test holes through the Gabbs Valley just down below town here and I'd help them out. If they'd break something I'd take it up the hill and weld it up. I got to talking [with one man and I] said, "Boy, I'd like to have a thermal well."

He said, "Well, let's go take a look at the back of your yard."

We looked, and there was no way to get that drill rig in the back yard. My neighbor owned the lot below me and I tried to buy it and, "No." He said, "I buy stuff, I never sell." It made me a little mad. Then he said, "What in the hell you want it for?"

I said, "I've got a chance to get a free thermal well drilled."

He said "Go ahead, let them drill it."

Well, I wouldn't put it down unless it was on my property because I'd have to get permits and all that. But the number 10 well here was the main well for this end of town and they hit hot clay at 50 feet and the first hot water at 100 feet. So I figured I'd only have to go 120 feet to have thermal water. I'm still thinking about it.

RM: Why couldn't you put it in your front yard?

EA: Well, Bunny Barredo and I had thought . .

RM: Who?

EA: A fellow by the name of Barredo. He was a mining engineer. He said, "Hell, we'll just get them in here and we'll put it in my driveway or your driveway. I'll go in with you." But it's a pretty big rig to [move], then by time you get a permit and everything . .

RM: Did you have to get a permit? Why couldn't you just say it's a water well? Well, you've got a lot don't you, so you don't have an acre?

EA: Yes. That's the thing - that acre. But I had a crusher here and I traded it off to a guy for a hydraulic special built drilling rig, so I've been thinking about . . . I've got to go look at it. I traded it sight unseen but it was built for a good friend of mine; I knew the guy who built it. He was a master builder. It's all hydraulic. I figure I could sneak that in here and just . . .

RM: You could just take down your fence and put it right in the front yard and then you could plant your grass and everything right over the pipes. How would the system work? The water would come out of the ground and then what?

EA: Then this water's moving all the time a little bit. For just heating one house they said it'd be no problem putting it right back in the same hole.

RM: How do you get it back in the same hole?

EA: Just run another pipe down there. Circulate it through your house and put it right back in.

RM: Wow, what a way to heat your house!

EA: Yes. I've got to eyeball that a little more.

RM: That sounds interesting. It's a wonder they never went to it for the whole town.

EA: The book the state made is about an inch thick, and it's got everything in there - the injection veils, putting the water back into the ground . . . but the thing is, most of the people who care to Gabbs don't figure to be here very long. We could have had good water 15 years ago when they put in a sewer plant in the other end of town. The mayor wanted to go right into the water system and they threatened to tar and feather him. "By god, you stuck us for this sewer up here, and you ain't going to stick us for water."

CHAPTER FOUR

EA: You see, there was free water, free sewage - everything was free then - so they didn't want to rock the boat. And the people up there, when they got their new sewer plant, had to pay sewage fee.

RM: On the upper end?

EA: Yes. They had sewage running all over the ground and everything. It was terrible. The ground here won't handle leach lines. When they moved the doctor's clinic down here from up at the plant, we put in a real first class leach system and septic tank and everything. After about 4 years that ground closed up - or whatever it was - and the water was coming up out of the ground, so we had to tie it into the sewer system.

RM: What is it, a lot of clay?

EA: Some kind of clay or something. It looks like it's porous, but when water gets in it . . . it's probably bentonite, or something.

RM: Do you know anything about the geology of the magnesite and brucite deposits up here?

EA: Well, I've heard them talk a little bit about it. As a matter of fact, I went to a meeting here not too long ago and these super government geologists figure that this deposit was developed at least 25 miles from where it's sitting now. It was moved in here by the plate movements and so on. They think that because the base of where it comes from is not here.

RM: Where do they figure it is?

EA: Well, that's what they'd like to know; they figure it'd probably be one hell of another magnesite deposit.

RM: Can they tell which direction it came from?

EA: It seems to be over to the southeast - they figure it came from over in there somewhere - because they found the same types of rock back in these hills on the other side to the south and east. Some of the lime deposits here are 1000 feet thick and they know this whole country really moved around.

RM: How deep is the ore here? How deep does it go up on the hill?

EA: One pit - the best pit they had, which they've mined out - was a good 400 to 500 feet of ore in that one mountain. And the one they're working on now will be more than that. It'll be over 1000 feet of ore because it's way up on the mountain. They've got a sub pit off to one side that

Standard Slag had and it's a couple hundred feet deep. The government drilled this, they really diamond drilled the whole area during the war, so they pretty well know where it's at.

RM: Is there a lot of ore left?

EA: Well, it has to be upgraded. This Aldabra claim they're working on has a pretty good chunk of that mountaintop. Then the more they come down, the better the ore will be. When I came to work the personnel man said, "Well, we've got a life expectancy of 15 years." And they were just getting good then. From face to face the mine is a mile across.

RM: How big is it in the other direction?

EA: It's about a quarter of a mile. It's not all ore - there's low grade and high-grade mixed up. It's a son of a gun to mine.

RM: Because it's so spotty?

EA: Yes, it's spotty and then they've got intrusions, dikes, serpentines and that kind of stuff involved in it.

RM: And they figure the root of the thing is somewhere else?

EA: That's what these high-powered, real expert geologists say.

RM: That's really interesting. Of course there's probably something else over the root now, isn't there - maybe a big mountain range. EA: Yes. Well, it's a thermal type operation. The solutions altered all these rocks. [That's how you got] the magnesium.

RM: But the country rock is dolomite?

EA: Dolomite and granite.

RM: There's same granite up there?

EA: Oh, there are big granite intrusions there. Most of the intrusions are dykes and dolamites. The beds were laid in to where . . . they didn't get altered. Probably the limestone and so on could have all been there before the granites even came up.

RM: And then these solutions came up and deposited and then the granite came in?

EA: Yes.

RM: Let's talk a little bit about some of the people who have run the mine and so on.

EA: Pat Willard was one of the first works managers when I came to work; he was a very knowledgeable mining engineer. Norman Hanson was works manager for a while.

RM: Is the works manager the superintendent?

EA: He's the head of everything. He's the top man. Norman Hanson had worked for Basic for years. He was involved with the brucite operation before they ever got involved with the magnesite. You see, Basic bought and leased these magnesite claims from the government and some people named Segerstom. They had a bunch of claims right in the middle too.

RM: Were these original claims that . . .

EA: Yes. The government accumulated all the claims they could.

RM: Was this during the war or afterwards?

EA: No, the government was getting rid of them after the war, but when they started to put the plant in here they tied up all the claims.

RM: Did they buy them from the original owners?

EA: They bought some from the original owners and they leased quite a few of them, too.

RM: I see. Were the terms of the leases good deals or did the government basically come in and take them?

EA: I think they were pretty good deals. At least it was a pretty good deal for the people after Basic took them.

RM: So the mine was not owned by Basic during the war?

EA: No, just the brucite. But they were leasing most of the brucite claims at that time, too. They bought some of them but they were leasing some of them. Basic ran the brucite camp all through the war separate from the government. Actually, there was a brucite camp and there was a townsite - what they called townsite - that the government built.

RM: That was this one here.

EA: Yes. Then there was what they called Smithville. That was where the Smith brothers developed a business on 2 placer claims.

RM: Where was that?

EA: That's the other end of town.

RM: Oh, that's the north end - North Gabbs?

EA: Yes. And then there was the Sierra Magnesite camp. So there were 4 different camps here.

RM: But the big operation was run by the government?

EA: Right. The government had big dormitories up there for men and women and a big mass hall, big recreation center, plus the houses, plus the 4-plexes down here, big recreation areas here, gas stations, everything. The Smith brothers got in because they found out about this and went and staked 2 placer claims.

RM: They had placer claims where the store and everything is now?

EA: Yes. They had a big gambling hall and store and . .

RM: Oh. And they built them on these placer claims?

EA: Yes. And they didn't get them patented until in the '50s.

RM: Is that right? There probably wasn't any ore on them, was there?

EA: Well . . . gravel. [chuckles] After they got them patented then they sold them. But they went through a few works managers there. This Norm Hanson was an outstanding guy. He was the fellow who got Gabbs incorporated. The problem was, at that time Gabbs - or Basic - was the largest taxpayer in the county. And we had no streets, the street lights were 100-watt light bulbs, no telephones - we weren't getting anything back up here [for our tax money]. No deputy - one old guy was the deputy sheriff. So Norm Hanson went into the state assembly and [got Gabbs incorporated]. We didn't even know we were being incorporated till one day we found out we were incorporated. (This was in 1954.)

RM: Is that right? He had put the bill through the assembly?

EA: Yes. So then we started getting money and got the streets oiled, street lights and some other things. I was one of the first councilmen on that . . .

RM: You were? Could you talk a little bit about being a councilman on a newly incorporated town

EA: It was pretty interesting. We got incorporated and we tried to deal with the county commissioners to get our fair share of the money and have a little say. It was fairly good, but not good enough. Then we decided to divide the county and we got that law through.

RM: What do you mean, divide the county?

EA: Put it in districts. At that time all 3 commissioners were in Tonopah. So we had a couple of real sharp attorneys. As a matter of fact one of them is in the [state] supreme court now - Charlie Springer. So they got the bill passed and they left it up to the county commissioners to divide the county. They divided it. They divided it like a piece of pie. Each point of the pie ended up in Tonopah, so we were dead again. We figured they'd go straight across the county but it didn't work that way. But they knew we were after them. We had pretty sharp people up here putting the pressure on us to get something . . . hell, the fire trucks were old 1942 Fords and a couple of pickups. So we made a deal with Montecito, California, to buy a 1934 Mack truck. That was the first truck we had that would pump a little water.

RM: Was there a problem with fires here?

EA: Not very much - we've had very few fires. They had this store burn down and a couple of trailers. The store was probably arson, but you can't prove it. That was the worst one. But most of the fires we put out in good shape. I it in 10 years with the fire department. We had a little station downtown and one up at the plant. We had the Chevy half-tons with front pumpers on them downtown, and up at the plant we had a 3/4-ton Ford with . . .

RM: And where was the fire station downtown?

EA: It was right across from the junior high school. It was just a shed with a place for a fire truck.

RM: When did you build the new fire station?

EA: The new one here was about 10 years ago, wasn't it, Tina?

Tina Alworth: Well, after they moved that other one up.

EA: Yes, after the little one here, we had a wooden one.

RM: Where was that located?

EA: Right in the same place.

RM: As the new one?

EA: Yes, that's only about 8 or 9 years old.

RM: How did you fund the new one?

EA: Through the Fleischmann grants.

RM: They funded your library, too, didn't they?

EA: Yes. So that worked out real well. The city's been buying the fire trucks and ambulances, but generally, on the ambulance, the county does put in some money because we cover a hell of an area up here.

RM: Did your taxes go up when you incorporated?

EA: A little bit, not much You see, at that time they had that \$5 limit and everybody was paying about \$4.90 anyhow. So instead of the money going to Tonopah we got our \$2.10 or whatever. Whatever we got set the whole outlying tax deal, so we could wheel and deal with the county. For every 3 or 4 cents we dropped our budget, they would gain, county wide, more money. So they would make a deal buying fire hose or doing this or doing that or helping on the streets and we'd cut the budget - a lot of times way, down - so they could get money to operate on.

RM: What about being on council? What kinds of things did you deal with?

EA: Well, I was on public safety mostly all the time - that was keeping a good police force and fire department.

RM: So before, you just had this deputy and he wasn't too good?

EA: No, he never got out of the bar. [chuckles] The only reason I got mixed up in politics . . . there was a fight going on outside the Keystone area (that's the bar down at the lower end a mile south of Gabbs) and this guy was beating a guy with a crescent wrench - a 12-inch crescent wrench. His wife came in and asked the deputy to go break it up. "Aw, get away from me."

So I went out there and took a look and god, this guy was slapping the other guy every once in a while with this crescent wrench. I went in and I said, "You'd better go out and break that up. That guy's liable to kill that guy." I went out and took another look and came back and, "Are you going to go or else."

Then he said, "If you don't shut up I'm taking you to jail "

I said, "OK." (They were just making the motions to run for these different offices.) "I'm going to run for council and get on public safety and I'm going to have your hide." That's the only reason I got into it. I got in and he was gone.

RM: You got rid of him?

EA: He left town.

RM: He knew his days were numbered? What did you do then for police?

EA: We hired a city marshall

RM: one guy?

EA: One guy at that time and maybe he'd have a couple of part-time deputies. After I got out of politics, one time they got carried away. We got an ex-Marine who was [in charge of] public safety and he had about 6 policemen, about 6 police cars . . . boy, he was old army. But that only went about one year and they cut back. Now they take and contract, like Orange County does in California - a lot of cities contract with the county. And it works out well. If there's any trouble you go to the sheriff and if you don't like a deputy, why, they move him around.

RM: What other kinds of things in the community have you been involved in?

EA: Oh, swimming pools . . .

RM: How did you pull that one off?

EA: The company put that in with volunteer help. There were a whole bunch of us. They had it fabricated but we had to assemble it. Pete Solaegul, who was working for us, was a pretty good plumber. I worked with him on the plumbing of that. We plumbed it all in. Then we had our welders - those guys volunteered to come down and weld it; it's an all-steel pool. They welded it all up and the company bought the fill in and fenced the area.

RM: What year was that?

EA: Oh, that was about '57, I'd say, or '56.

RM: And the pool is still there?

EA: Yes, but it's in pretty bad shape. They're going to have to redo it completely.

Then the ball field up here at the school was all local volunteer help and they used company trucks. The ball field down below here was done the same way. This was a good town for volunteers until TV came in. That was the end of the ball game, practically. And then when the VCRs came in, things went worse yet. If you've got a meeting, you can hardly get a crowd of people to them.

RM: I was talking to Margaret Jones and she was saying how for many years people were really community-minded and -spirited. And she said that people were honest. You never locked your car or your doors or anything.

EA: Oh yes. But you'd better do it now.

RM: She said this deterioration has come in the last 15 years or so. Do you agree with that?

EA: Well, I think, overall, the whole nation has down-graded. The down grading really started in the hippie days. From then on, it was bad.

RM: You didn't have hippies in Gabbs, did you?

EA: Oh yes, we had them go through here. And some of them who had been in the hippie culture came here and went to work . . . long hair and long beards. We had an awful fight. We had them put their hair and beards in hairnets and all that kind of stuff.

RM: They had to put their beards in hairnets?

EA: Yes. You couldn't refuse to hire them, but the Bureau of Mines federal people had pictures of guys drilling in the pit and their whiskers caught in a drill rig and ripped off and their hair . . . they were scalped. But then they brought drugs with them and that was bad. RM: What role do you think TV has played in the general deterioration? EA: Just that they stay home - they won't go out. It used to be if there was a little dance or something going on, the whole town was there. At the Firemen's Ball, the whole town was there. Now they'll support the firemen, they'll go around and sell tickets, they'll buy a ticket, but I suppose 50 percent of the people who buy tickets never go. In the old days, if you were going to put a ball field in, half the town was there. It's like working on the pool - you had more guys than you had tools to work with. Now they might shag up the first time, then no more. I've ended up, working by myself on it. About 3 or 4 years ago I told them, "That's it. I'm done. Let some of the younger guys [take over]."

And the children, community-wise, seem to have gotten away from a lot of that stuff, too. Whether it's the teachers or what, I don't know.

RM: How do you mean, they've gotten away from it?

EA: It used to be that you knew every kid in town, but anymore, you never see them out. Like my grandchildren - the boy is hooked on TV. The girl is not too civic-minded either.

RM: So between the hippie values and the TV . . .

EA: The hippie value was, "I'll do my thing the easiest way I can to get by. I don't need worldly goods or this or that." And that's the way a lot of them were.

RM: What other kinds of things were you involved in? Were there any community organizations or civic groups that you belonged to?

EA: Well, the VFW. I've been a life member of that. And I'm a member of the Lions Club and I've put in quite a few years with the fire department.

RM: Is the Lions Club still active?

EA: Yes. I didn't become an original charter member. They had about 30 to begin with and they said, "This here's not a fork and knife club," and I didn't have time to attend all the meetings and really get involved so I didn't join until about 3 years ago. It's down to about 10 or 12 people now, so I doubt if they can keep a-going. And it's the same thing - we were out of town here a while back and that night, only 2 guys showed up for the meeting. The VFW has 100-and-

some members but maybe 30 in town and 6 or 8 members will attend a meeting. They just stay home and watch TV.

RM: What about the activities of those groups? What kinds of activities have they had in the past?

EA: Well, the VFW have a crab feed and this and that. The Lions used to have their [activities] and so on. The golf club was active for a long time, really. We're trying to get it brought back. We had a good gun club at one time - they incorporated and everything. They fell by the wayside. Now we've got a new one with a good trap setup and a 600-yard range and 200 yards in pistol, and I think that'll start going. We've got a pretty good crowd involved in that. I'm trying to get the golf club going again so I can turn all the records over to new people. RM: You were involved in the original golf club?

EA: Not the original one. The original golf club was built when Stearns Rogers and McDonald Engineering were here. Some of those guys had just come from Saudi Arabia and they said, 'Why don't we put in a golf club like they have over there? A sand club out in the desert.' That's what it is. They leveled off these flats and they got just as hard as this floor. Then the greens were tails [mine tailings] and they put crankcase oil in them. You raked them and you had a putting range and you smoothed it out. But you can't use crankcase oil anymore so they've just bought grass carpet for that putting range.

RM: How many holes was it?

EA: Nine.

RM: When did you build that?

EA: They started that in about '53 and in 1954 or something like that [they poured] the concrete floor of the clubhouse. They had a nice clubhouse out there and then when they were building the FMC mill we got a bunch of druggies in here and they had a couple of free-for-alls out there and wrecked everything. We've got material and money to rebuild it now.

RM: When did the golf club go down?

EA: It went down in about '82.

RM: When did your VFW get organized?

EA: Fifty-seven.

RM: And how about the Lions?

EA: It was in the '70s.

CHAPTER FIVE

EA: We might talk a little bit about the recreation through the years.

RM: Yes, that'd be good.

EA: The deer herds winter right east of Gabbs near the Reese River, that area of the mountains up in there and also in the Paradise Range. You'll see a lot of them right in the pits. A lot of hunters go up around Ellsworth and get their deer there. There are a lot of bow hunters here - they hunt their deer with bow and arrows. And a lot of people go from here to Walker Lake for fishing, and also to the creeks off the Reese River.

RM: Are the Reese River creeks pretty good fishing?

EA: They're not too bad when there's water in them. Then there's prospecting. About half of the older guys who worked were prospectors who'd be out in the hills when the tungsten boom was on. One electrician made several million dollars on a tungsten strike.

RM: Is that right? Where was it?

EA: It was on Paradise Peak in the Paradise Range. He went up there and found one of the highest grades of scheelite that was found.

RM: Is that right? How big was the deposit?

EA: Not too big. She was a pocket - they milled pretty near all of it down at Bishop.

RM: What was the fellow's name?

EA: Hank Baxter. His brother-in-law was in with him, and his brother-in-law became wealthy. He invested in real estate and Hank tried to keep in the mining racket and build a mill and that was the end of him.

RM: But they made a lot of money on it.

EA Oh yes, several million of dollars. And the tungsten mill north of Gabbs produced \$7 million worth of tungsten.

RM: Now what was the name of that mine?

EA: That was Dougan's.

RM: Do you know the Dougans?

EA: Yes. Old man Dougan had worked, I think, for the government through the war days. Maybe he even worked at Basic before I did. Well, they bought those claims for \$50,000. Basic had a chance to buy them but they turned down whoever owned them. But the claims they were working on were kind of interesting. It was a pretty good mine. Jim Collett and his sons were working for Dougans and they found an outcropping of tungsten ore that Jim Collett told me was 18 inches long and 4 inches wide. They leased that claim to Dougans for a year, and to start out with they were just working on the claim after they worked their shift. And it started getting wider and wider. In a year's time they took out about \$1-1/2 million and at midnight at the end of the year's lease, he said the Dougans were there at the last skip load and that was that.

RM: [laughs]

EA: But Dougans had their saw mill here in Gabbs.

RM: Were they local guys?

EA: They had lived here, yes. There was the father and the son and the grandson. The boy went to high school here and young Bill was the mine supervisor and the old man was the fiesty old guy who kept them all going. They still own that mine. There's good ore in it yet, but tungsten isn't north going after.

This Jim Collett was a real old-timer. Through the Depression he lived in Ellsworth. They had a little town at Lodi at that time where the post office was, and the store. He would walk from Ellsworth, an elevation of 7000 feet, down to the Lodi Valley. And I'll tell you, that is one heck of a walk going back there.

RM: He walked that every day?

EA: No no. Just to pick up his nail a few times. But he said he had a little gold mill going there. He said all through the Depression he never made less than \$1100 a month.

RM: Is that right? That was good money then.

EA: You bet. He made several fortunes in the mining business. Antimony was a big thing with him, too.

RM: Is there antimony around here?

EA: Yes, there's some antimony. Most of the antimony's over in Dixie Valley. And there were fellows around here working a little quicksilver, too.

RM: Is there quick in the area, too?

EA: Yes. As a matter of fact, the fellow who found [the ore] where the FMC mine is had a little quicksilver deal just to the west. Earl Wilson and George Morehead and Bob Cornell [started it]. There was a little quicksilver showing on this hill where FMC was that they staked out. Earl was the one who ended up, with it. And the thing was, there were 2 or 3 outfits that leased it from him, but they never did find the gold. They were always after that quicksilver. He had it leased to some doctor in Los Angeles for 22 years, which put his kids through college. The L.A. doctor was the fellow who put in the little shaft and all that stuff.

RM: Why don't you give me a history on the Paradise Mine?

EA: Well, let's go ahead and follow Wilson through till he's out.

RM: OK.

EA: Now Earl worked for me. He was a crippled fellow - he had had infantile paralysis when he was a kid, fairly old. And he was a real good mechanic. Well, when he got close to 65 he wanted to retire. He found this mine and he decided he was going to quit everything. So he signed the mine over to his brother-in-law and a good friend of his and also a friend of his brother-in-law.

They the assessment work and they filed it with the county, but they didn't file it with the BIM (it had to be filed with the BLM by December 31). So FMC said that their little old man and little old lady prospectors found it and then they staked all around it. But I think probably . . . Johnson, one of the top geologists for UV Industries, was a friend of mine. [UV Industries] brought in Calahan, who was a government geologist in this area for 30 years. They had him come up and work with them on their geological work. And he told me, "You know we found 2 gold occurrences off of our property," and that was one of them right there, I'm sure.

RM: The Paradise?

EA: Yes.

RM: When he said "occurrences" was he talking about a little showing?

EA: No, a good showing.

RM: Was it high-grade?

EA: No, not really high-grade, but pretty big. They had a public meeting out here and I asked one of the top guys, "Did you guys get all the records of UV Industries and did you get Calahan's reports?"

"Yeah, we got them."

I said, "Did he make mention of the mine out there?"

And the guy just laughed and said, "He might've."

So I think that they knew it and were watching, probably. It came out (and this is something I can't figure) that on the top of that peak they said they've got an assay \$186 of

silver. But 3 or 4 different outfits had that, and some of them had assay labs. How in the hell did they miss that silver and gold? And they're still getting lots of quicksilver out of there.

RM: Are they saving it?

EA: Oh, you bet. They put it in flasks, I think, that hold about 2200 pounds. They're about that big around and this high.

RM: They're retorting it right there?

EA: Well, they retort it all right, but it's collected along with the gold and silver. They have to take it out - they fume it off before they put the concentrates in the big furnace.

RM: That must have been a huge deposit of quicksilver.

EA: It was mixed up, with the gold and silver. And that is one of the best mills and best mines in the state.

RM: In terms of what, production?

EA: Production, recovery rate and amount of tons they run. Whoever designed that . . . especially that one . . .

RM: How big is the mill?

EA: It's set up for 4000 tons a day.

RM: Are they heap leaching, too?

EA: Yes, they're heap leaching, too. Their main deal is a regular mill counter current, and big leach tanks and everything.

RM: So they mill it and then leach it?

EA: Yes, they mill it and they put it in these immense tanks of cyanide that dissolves the gold. Then they take and run the solutions that take out the salt. The solutions go into the filters and then they precipitate it on zinc.

RM: Oh - they're not doing the heap leaching where they just take the low-grade and leach it.

EA: No. They've got a pretty good leach pad. As a matter of fact, I think this Catch Up Flat is going to be all heap leach.

RM: Catch Up Flat?

EA: Yes. That's right south of the main Paradise Peak body.

RM: Have they got a lot of reserves there?

EA: Well, they claim that 1994 will be the end of it. But I think . . . all of them have been hollering, just like Basic was, "15 years" and 30 years later . . .

RM: Yes - being real conservative.

EA: You've got to be. What they tell me is that the Securities and Exchange Commission [won't allow them to] prognosticate or kind of predict. They've got to be conservative on account of the dang stock. The thing is, for instance, when you're buying FMC Gold stock, that's a separate deal from FMC - it's FMC Gold. So if you sit here buying a stock at \$10 a share and they're only going to last 2 or 3 years . . . they're only paying a 5-cent dividend. I talked to a guy [when] I did a little business. I said, "How does this work?"

"Well," he said, "they're using a lot of that money for exploration. And they're paying off all the bills, what it costs to build a plant and equipment." He said, "You can get in there at the right time when everything's paid off, keep it a little while and dump it and you might make some money. And," he said, "you might end up owning paper, too."

They did an awful lot of development work before they decided to go. But it is one heck of a mine, I'll tell you that.

RM: I'm going to have to go down and see it.

EA: Yes, you ought to get in and get introduced to Woody Whalen. He's from Wyoming. He's a very interesting guy to talk to.

RM: Is he the super there?

EA: Yes, just tell him you did a little history of Ed Alworth and he knows me and he's a Lion and all that - a nice guy. And he could probably tell you a little bit about that mine. It'd give you a chance to get a little history of that.

RM: Right. The Corona Mine isn't in Nye County but on the road over here, isn't it?

EA: Yes, it's Mineral County.

RM: Is that a pretty big operation?

EA: Yes, they're moving a lot of rock. It's low-grade ore, though. They've got another one now - this open Alice mine, the Fremont. They're going to go, I guess. And then there's another one out of Grantsville that they mined last summer. They're thinking about going heap leaching. Then this Bell Flat (of course Bell Flat's in Churchill County) is going to go, I guess.

RM: Do you know anything about Lone? What was happening at Lone when you come here?

EA: When we came here lone was just a little store and a little bar - they-were there for many years.

RM: Who owned the store and bar?

EA: The O'Tooles.

RM: Bart O'Toole?

EA: He and the dad and the old-timers. Cislinis had been in there, and Kennedy and Phillips and

RM: Were they still there then?

EA: A few of them were still there. Their kids would go to school in Fallon.

RM: Who would be a good person to talk to over there? Does Bart O'Toole still live in the area?

EA: Young Bart must be out there; they still own the ranch.

RM: How about the Indian reservation?

EA I'll tell you, a person to talk to about that country over in there would be Mrs. Worthington. She was one of the Bells, I think, and that goes way, way back. She married Carl Worthington - his folks were big ranchers. They got wiped out in the Depression, and [before that] a lot of the ranchers went under in the big freeze-up of 1890 or something. Some of the brick houses over in Reese River Valley are very old.

RM: Is there anything else we should be talking about?

EA: Gabbs, in its day, was wild and woolly. I can remember when you came off the shift, if you wanted a beer you had to have a long arm to reach over the bar to get a beer handed to you.

RM: Is that right? It was that crowded?

Ma Yes.

RM: Were there a lot of bars in town?

EA: No, there were just 2. There was one in town and one down south of town one mile. (The one in North Gabbs was the Bucket of Blood and the one in South Gabbs was the El Rancho.) But the one uptown was a busy, busy establishment. Now they're all starving to death. They used to party till sunup. That was all there was to do, you know. Payday nights - Friday night, Saturday night . . .

RM: They got paid every week?

EA: No, every 2 weeks. But when we first came out here they were working this tungsten and working the mines up here and working quicksilver and exploration, construction . . . it was really a booming place and the wages were good. Everybody who lived here had to be working or you couldn't survive.

RM: What were the wages when you came here - day's pay for a miner?

EA: About \$15 a day, I guess, for a miner.

TA: You started out at \$1.55 an hour.

RM: That was pretty good money in '51.

EA: Yes, it was really-better than a lot of things. Even construction wasn't paying too much then.

RM: Right. You mentioned Stearns Rogers was in here. What were they doing?

EA: They were building a floatation plant.

RM: Oh, they were constructing that.

EA: Yes, they were in a couple of times, then McDonald Engineering was on the rotary kiln and the SRP plant. They'd have big crews when they'd come in. And McDonald Engineering built most of the original plant for the government.

RM: Where are they based?

EA: Well, that crew was out of San Francisco, but they had offices all over. Stearns Rogers is out of Denver. They were all good people. They really helped the town, too. They got involved with everything. And they paid good money so those guys had lots of money to spend.

RM: So things were good.

EA: Yes. But the history of the gold mines have fouled things up, you know. Just like Nye County now is hurting badly on this Stealth deal. [Stealth fighters were being transferred from the Tonopah area to elsewhere, which had an impact on the local economy.] For instance, you float the bond issues for schools. You've got a big mine and all these people, so you've got to have the schools. They close, then what happens? Boy, the people are gone . . . bam! How in the hell are they going to pay the bonds off? At the Democratic central committee the other day, I gave a little extemporaneous talk on this situation. And they wanted me to formalize it, and some of

them wanted to take it to Clark County and some to Washoe County. I was explaining how you can look at Virginia City, Tonopah, Goldfield, Tuscarora, Ely; all of them went through a boom, then, boy, down to nothing. Well, it's coming again sooner or later. What the hell are we going to do then? We've got high wages, then we've got poverty wages in this state. And like in the casinos in Vegas and the fast food places . . . when we go to the store with the wages we make and we get a couple of bags of groceries and it's \$100, what the hell happens to the people who are only making less than \$4 an hour? By the time they take income tax and Social Security out, they can't afford one bag of groceries.

RM: I don't know how they do it.

EA: If I had to answer for that, boy, I'd be trying to tell them what to do, but . . . it's pitiful. And people are caning in here right and left and these mining outfits have all gotten together now, and unless you've got 4 years experience in something you can't get on. They say, 'Well, we're filled up. We're not giving out applications.'

RM: Is that the way it is up here?

EA: Well, here they don't have to hire very many.

RM: They don't have any turnover?

EA: No - very little.

RM: How about Paradise?

EA: They've had over a 100 percent turnover, I understand. And they're paying good money, too. Well, all those outfits look greener over the hill. Like Rawhide - everybody wanted to go to work for Rawhide.

No, the retired people, the ones who just are living on Social Security, have a tough go. We've got some of these little old widows here in town, living on little or nothing. They give them a break - they practically give them their water. I don't think they pay any garbage pickup or sewer, so that works out pretty nice.

RM: Yes, you can get that in a small town.

EA: But this water is a flat \$30 a month, you know.

RM: That's a nice little chunk, isn't it?

EA: Yes. [chuckles] I'm going to watch them pretty closely, because they're making money, and I'd like to see them pay that note off in a hurry and not go to putting all that money in the damn general fund and goofing it off. I don't know how much longer we'll stay here. Actually, for us, this is the cheapest place in the state, because our house and everything is paid for.

INDEX

A.B.B. Corp
Aira Cobra
Aldabra claim
Alice Mine
Alworth, Elizabeth Schindler
Alworth, Louis
Alworth, Tina Weigel
ambulance service
antimony,
Austria
B-24 (airplanes),
Barred °, Bunny
baseball field,
Basic Magnesium,
Basic Refractories, Inc.,
Battle Mountain, NV
Baxter, Hank
Baxter, Vet
Baxter Mine
Bell family
Bell Flat Mine,
Bishop, CA
Bougainville
Brannon, Frank
Brownsville, TX,
brucite
brucite camp
Bucket of Blood bar
Bucyrus-Erie shovels
bulk plant,
Calahan, Mr
California
Camp Douglas, UT,
Canada
Catch Up Flat
Caterpillars (heavy equipment),
China,
Churchill County, NV
Cislini family
Clark County, NV,
cohart,

Collett, Jim,
Collett's gold mill,
Combustion Engineering Corp
community mindedness,
Consolidated Aircraft Corp.,
Cornell, Commissioner Bob,
Coronoa Mine,
dairy business,
Dart Co.,
dead burn clinker,
deer hunting,
Denmark,
Depression,
diesel shop,
Dixie Valley, NV,
Dougan, Bill,
Dougan family,
Dougans' mill,
Dougans' mine,
Fells, Howard Jr
El Rancho Bar
Ellsworth, NV
Ely, NV,
Euclid Equipment Co
Euclid trucks,
FMC Gold Co
FMC mine,
Fallon, NV
Fallon high school,
Fiji Islands,
Firemen's Ball,
fishing,
Fleischmann Foundation
floatation plant,
fluorspar,
Fort Sill, OK,
Fremont mine,
Gabbs, NV
Gabbs, NV (incorporation of
Gabbs community Library,
Gabbs fire department,
Gabbs mines,
Gabbs town council,
General Motors Corp.,

gold
Goldfield, NV,
golf club,
Grantsville, NV
Greece,
Guadalcanal, Solamon Is.,
gun club,
HMS plant,
Hanson, Norman,
Haul-Pak Co.,
Hawthorne, NV,
heating system,
heavy-media plant,
Hemimxford, NE,
Henderson, NV,
Herreshoff furnaces
hippies,
Homestead Act
housing,
hunting,
hydrotarders,
lone, NV
Japanese people,
Johnson, Mr.,
Jones, Margaret,
Kaiser, Inc
Kaiser mill,
Kaiser mine
Kennedy family,
Keystone bar
kiln guns,
kilns,
LB-30 (airplanes
Lahontan Dam,
Las Vegas, NV
law enforcement
Lawton, OK,
leasing,
light burn,
Lions Club,
Lodi, NV,
Luger (gun
Luning, NV,
magnesite

magnesium (also see brucite & magnesite),
magnesium oxide,
maintenance work
McDonald Engineering Co.,
Mexican people,
military police "MPs,"
Mineral County, NV,
Minnesota,
Moorehead, George,
Moss Landing plant,
Mueller, Max,
mule-pack artillery,
Nevada economy,
Nevada State Assembly,
New Caledonia,
New Guinea
North Gabbs, NV,
Nye County, NV,
Nye County Commissioners,
Orange County, CA,
O'Toole, Bart,
O'Toole family,
P-38 (airplanes),
P-39 (airplanes),
PBY (flying boats),
Palawan, Philippines,
Paradise Mine
Paradise Peak,
Paradise Range,
Philippines,
Phillips family,
Port St. Joe, FL,
Premier Refractories Co
prospecting,
quicksilver
railroads,
ranching,
Rawhide Mine,
Reese River Valley, NV
refractories (also see special refractories products),
rotary kiln,
Round Mountain, NV,
San Diego, CA,
San Diego Aviation School

Saudi Arabia,
scheelite,
Schindler family,
schools,
seawater plants,
Segerstom family,
or system,
Sheckler district, NV,
shipping ore,
shovels,
Sierra Magnesite Co.,
silver,
68th fighter squadron,
Smith, Gordon & Lindsay,
Smithville,
Solaegul, Pete,
Solomon Islands,
South Gabbs, NV
special refractories products "SRP,"
Springer, Justice Charlie,
Springer, Harry
Standard Slag Co.,
Stealth airplanes
Stearns Rogers Manufacturing Co.,
(the) Strip,
Summit King Mine,
swimming pool
Switzerland
taxes,
television,
13th Air Force,
Tonopah, NV,
trucks,
tungsten,
Tungsten Gulch
Tuscarora, NV,
U.S. Army,
U.S. Bureau of Land Management,
U.S. Bureau of Mines,
U.S. Government,
U.S. Securities & Exchange Commission,
U.S.S. John Lykes,
U.V. Industries Inc.,
Veterans of Foreign Wars "VFW", 57,

Virginia City, NV,
volunteer help,
wages,
wagon drills
Walker Lake, NV,
Washoe County, NV,
water
water system
Weigel, Edward
Wells, Howard
Wells Cargo Inc.,
Westbrook, Lt. Col. Robert B.
Whalen, Woody,
Willard, Pat,
Wilson, Earl
World War I,
World War II
Worthington, Carl & Ruth,
Worthington family