

# The PAYSTREAK

Volume 12, No. 2, Fall 2010

The Newsletter of the Alaska Mining Hall of Fame Foundation (AMHF)

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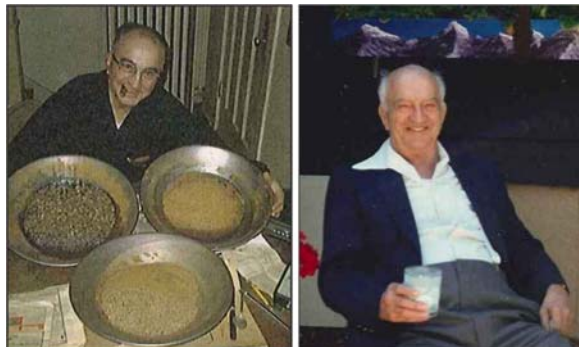
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## Alaska Mining Hall of Fame Foundation New Inductees

### AMHF Honors Pioneers Important to the Seward Peninsula Gold Dredging Industry



Nicholas B. and Evinda S. Tweet: It is difficult to name any couple in Alaska mining history that has had more longevity and perseverance than Nicholas B. and Evinda S. Tweet. In marriage, they formed a team that created a remarkably stable, family-owned firm, N.B. Tweet and Sons, which has mined gold in Alaska for 110 years. Nicholas and Evinda mined and lived in several placer mining camps, worked graphite claims, operated gold dredges, and inspired their descendants to continue the placer mining lifestyle. Both Evinda and Nick died at the family mining camp, near Taylor, north of Nome. In 2010, N.B. Tweet and Sons operated the only bucketline stacker gold dredge in North America.



Carl S. (left) and Walter A. (right) Glavinovich: Two Croatian (Yugoslavian)-born brothers who, collectively, devoted more than one-hundred years of their lives to the prospecting, deciphering, drilling, thawing, and dredging of the Nome, Alaska, placer gold fields. Most of these years were in the service of one company, the U.S. Smelting, Refining, and Mining Company (USSR&M) or its direct affiliate, the Hammon Consolidated Gold Fields. Unlike most company managers, such as Roy Earling and James Crawford, The Glavinovich brothers did not have engineering degrees, but over the years they earned the equivalent. Through innovation and hard work, Carl and Walter managed to keep Nome's gold dredges operating in the post-World War II era when inflation, combined with a fixed price for gold, made profitable gold mining challenging.

**Supported by the Alaska Miners Association  
Alaska Mining Hall of Fame Foundation (AMHF)  
Induction Ceremony, November 4, 2010  
Sheraton Hotel, Anchorage, Alaska**

**Program**

**The general public is invited to the Alaska Mining Hall of Fame Foundation (AMHF) induction ceremony from 7:00 to 9:00 PM, on November 4, 2010. The induction ceremony will take place in the 3<sup>rd</sup> Floor Ballroom of the Anchorage-Sheraton Hotel. There is no charge for admission. Refreshments will be served.**

<b>Coffee and Donuts</b> .....	6:30-7:00 PM
<b>Introduction and Purpose of the AMHF</b> .....	7:00-7:10 PM
<b>Presentation of Inductees</b>	
Nicholas B. and Evinda S. Tweet, by Thomas K. Bundtzen.....	7:10-7:40 PM
Carl S. and Walter A. Glavinovich, by Charles C. Hawley.....	7:40-8:10 PM
<b>Coffee Break</b> .....	8:10-8:30 PM
<b>Recollection of Inductees from the Audience</b> .....	8:30-9:00 PM
<b>Adjournment</b> .....	9:00 PM

## Introduction and Acknowledgements

The November 4, 2010 induction ceremony of the Alaska Mining Hall of Fame Foundation (AMHF) features four pioneers important to the gold dredging industry on the Seward Peninsula of western Alaska. The Peninsula is the undisputed king of Alaska's gold dredging industry: more than half of the 50 plus 'gold boats' operated in Alaska during the Twentieth Century were on the Peninsula. The inductees contributions contrast in both size and scope within the dredging industry.

Minnesota-born Nicholas B. (Nick) and Evinda S. Tweet were the inspiration for a remarkably stable, family-run business, known then and now as N.B. Tweet and Sons, which has operated gold mines in Alaska for 110 years. Nick got his start in gold mining in the pre-Klondike, Yukon River region in 1894, but he eventually made it to Nome, and then on to Teller, where he and Evinda raised four boys. The Kougarak was their last destination, where their descendants still mine gold. N. B. Tweet and Sons has operated gold dredges on the Seward Peninsula for more than 50 years.

Whereas the Tweets represent the small scale end of the dredging business, Yugoslavian immigrants Carl S. and Walter A. Glavinovich represent the opposite spectrum: operating and maintaining the nine and ten cubic foot dreadnaughts of the USSR&M Company in the Cape Nome dredge fields. Through innovation and hard work, Carl and Walter managed to keep Nome's gold dredges operating in the post-World War II Era, a time when inflation, combined with a fixed price for their product, placer gold, made profitable mining a difficult challenge indeed.

Tom Bundtzen compiled the biography for the Tweets, using Territorial and State of Alaska records, published historical accounts, and interviews with family members, especially Douglas and Bill Tweet. Charles Hawley provided the summary of the Glavinovich brothers, also using published accounts, and on-line sources such as The Nome Nugget, and the Anchorage Daily News and non-profit organizations in Nome.

The Tweet and Glavinovich families provided most of the photographs used in this issue of *The Paystreak*.

Tina Laird of Pacific Rim Geological Consulting, Inc. edited the biographies and formatted *The Paystreak* for publication.

## Previous Inductees, Alaska Mining Hall of Fame

### *National Mining Hall of Fame Inductees*

Six charter members of the Alaska Mining Hall of Fame Foundation were previously elected into the National Mining Hall of Fame in Leadville, Colorado.

**Stephen Birch:** Founder and developer of Kennecott Copper Mines.

**Frederick Bradley:** Successful manager of Treadwell and A-J Mines, Juneau.

**John Treadwell:** Founder of Treadwell Mines, Juneau.

**Alfred H. Brooks:** Chief Geologist of U.S. Geological Survey in Alaska.

**Earnest Patty:** University of Alaska, and manager of Placer Dredging Venture.

**Clarence Berry:** Prominent Klondike and Interior Alaska miner.

### *Alaska Mining Hall of Fame Foundation Inductees*

#### Fairbanks, Spring 1998

#### **Induction Ceremony Honoring Early Yukon Basin Traders and Prospectors**

**Alfred Mayo:** “Captain Al” well-known Yukon River trader, prospector.

**Jack McQuesten:** Known as the “Father of the Yukon” grubstaker for prospectors.

**Arthur Harper:** Well known and respected trader and prospector and promoter of the Yukon.

**Howard Franklin:** Fortymile prospector, discovered first “bedrock” placer gold in Alaska.

**John Minook:** Creole-Athabaskan prospector who discovered Rampart district.

**Felix Pedro:** Discoverer of Fairbanks district in 1902.

#### Nome, Summer 1998

#### **Induction Ceremony Honoring Pioneers of Nome Gold Rush**

**John Brynteson:** A ‘Lucky Swede’; an experienced hard-rock miner, discoverer of the Cape Nome district.

**Erik Lindblom:** The eldest of the “Lucky Swedes”, a tailor.

**Jafet Lindeberg:** The Norwegian of the ‘Lucky Swedes’, president and manager of the very successful Pioneer Mining Company.

**Charles D. Lane:** Tough, honest, and wealthy miner who helped the Lucky Swedes in their legal battles.

Juneau, Spring 1999

**Induction Ceremony Honoring Discovery of Juneau District**

**Joe Juneau:** Native of Quebec, a California 49er, co-discoverer of gold in the Juneau district.

**Richard Harris:** Irish immigrant, co-discoverer of gold in Juneau district.

**George Pilz:** German immigrant who sent and financed the Juneau and Harris prospecting ventures in the Juneau area.

**Kawa.ée:** Tlingit leader who brought rich gold samples from Gastineau Channel area to George Pilz

**Livingston Wernecke:** Geologist-engineer for the Bradley companies of Juneau.

**Bartlett Thane:** Promoter-founder of the world's largest gold mine, the Gastineau at Juneau.

Anchorage, Fall 1999

**Induction Ceremony Honoring Mining Pioneers of Southern/Southwest Alaska**

**Andrew Olson:** Swedish immigrant, innovator at Flat; the original organizer of the platinum mining complex in the Goodnews Bay Mining district.

**Evan Jones:** Welsh immigrant; the true father of Alaska coal mining industry.

**Wesley Earl Dunkle:** Kennecott engineer and innovative geologist, co-founder of Star Air Service, predecessor of Alaska Airlines.

Fairbanks, Spring 2000

**Induction Ceremony Honoring Early 20<sup>th</sup> Century Interior Pioneers**

**Emil Usibelli:** Italian immigrant and founder of Usibelli Coal Mine, Inc., Alaska's only and historically largest producer of coal; civic benefactor in Fairbanks.

**John B. Mertie Jr.:** Leading U.S. Geological Survey geologist; outstanding earth scientist, mathematician, and world expert on platinum.

**Fannie Quigley:** Prospector, renowned for her bush skills, legendary Kantishna character.

Juneau, Spring 2001

**Induction Ceremony Honoring Early Government Role in Mining**

**Benjamin D. Stewart:** State and Federal mining administrator, Alaska constitutional delegate at Alaska Statehood Convention in Fairbanks.

Fairbanks, Summer, 2001

**Induction Ceremony Honoring the Pioneers of the Large Scale Gold Dredging Industry of Nome and Fairbanks Districts**

**Norman C. Stines:** Visionary engineer who planned and supervised original USSR&M activities in Fairbanks district.

**Wendell P. Hammon:** Installed the first three dredges in Cape Nome district; helped design financing for what became USSR&M dredge fleets in Alaska

**James K. Davidson:** Designed and built Miocene and Davidson ditch systems.

Anchorage, Fall 2001

**Induction Ceremony Honoring Discovery of Flat District**

**John Beaton:** Co-discovered Iditarod district with William Dikeman.

Fairbanks, Spring 2002

**Induction Ceremony Honoring Successful Miners and Engineers of Early 20<sup>th</sup> Century**

**Frank G. Manley:** Highly successful miner in Fairbanks, Hot Springs district, and Flat. Founder of the First National Bank, Fairbanks

**Herman Tofty:** Norwegian immigrant who worked prospects near Manley Hot Springs.

**Chester Purington:** Acclaimed international mining engineer; wrote treatise on Alaska placer fields.

**Thomas P. Aitken:** Arguably the most successful small scale mine developer during the Alaska-Yukon Gold Rush; worked both lodes and placers in Alaska and Yukon.

Anchorage, Fall 2002

**Induction Ceremony Honoring Immigrant Pioneers**

**Peter Miscovich:** Croatian immigrant who settled in Flat, Alaska 1910. Pioneered the use of hydraulic mining techniques.

**David Strandberg:** Swedish immigrant who joined the Klondike gold rush in 1898 and the Iditarod rush of 1910. Built placer mining dynasty Strandberg & Sons, Inc.

**Lars Ostnes:** Norwegian immigrant who mined in the Iditarod district and developed placer mines in remote western Alaska for over 50 years.

Fairbanks, Summer 2003

**Golden Days Induction Ceremony (also recognized during Fall AMA convention)**

**Kyosuke “Frank” Yasuda and Nevelo Yasuda:** Japanese immigrant and his Eskimo wife, discovered Chandalar gold and founded the community of Beaver.

Anchorage, Fall 2003

**Induction Ceremony Honoring Early and Mid-20<sup>th</sup> Century Placer Miners**

**John Gustavus (Gus) Uotila:** By 1915, Gus Uotila was known as a tough Iditarod teamster. He mentored placer mining operations throughout Alaska and became a respected overland freighter.

**Simon Wible:** He mined gold, built water canals, and became a wealthy man in California. When the time the gold rush came along, he pioneered hydraulic mine technology on the Kenai Peninsula.

Fairbanks, Spring 2004

**Honoring Early Pioneers Associated with USSR&M Dredge Fleet**

**Roy B. Earling:** Built pre-World War II FE Company into one of the most efficient and successful dredge mining firms in the world.

**James D. Crawford:** Well organized manager who acquired new dredge properties and guided FE Company into successful post-World War II period of gold mining.

**Jack C. Boswell:** Engineered the development of the rich Cripple deposit; and helped build giant FE machines used to dig deep placer deposits. Published historian of USSR&M era.

**Genevieve Parker Metcalfe:** Breakthrough woman mining engineer who developed initial plans for FE Fairbanks operations, wrote a landmark thesis on Alaska placer mining, and was a champion athlete and scholar.

**Earl Richard Pilgrim:** First Professor of Mine Engineering at University of Alaska. Independent Kantishna miner and pioneer, and noted FE consultant; “Mr. Antimony” in the US.

Anchorage, Fall 2004

**Honoring Those in the Mining Legal Profession,**

In Cooperation with the History Committee of the Alaska Bar Association

**William Sulzer:** Bill Sulzer became a prominent New York attorney and politician and briefly served as Governor of New York. The ever-optimistic Sulzer mined copper in southeast Alaska and developed gold in the Chandalar district.

**Joseph Rudd:** Shortly after statehood, Rudd drafted the State’s mining law on state lands and was sought for his expertise on natural resource issues throughout his career. He was killed in a plane crash in Anchorage upon his return from Juneau after discussing with other Alaskans challenges to President Carter’s Implementation of the 1978 Antiquities Act.

Anchorage, Fall 2005

**Honoring the Discoverers and the Developer of Platinum Resources at Goodnews Bay**

**Per Edvard (Ed) Olson:** Born in 1898, Edward Olson was born into a large farm family in Sweden and immigrated to the United States in 1905. In 1934, he assumed the position of general manager of the Goodnews Bay Mining Company (GBMC), the largest supplier of platinum in the U.S. during 1934-1975.

**Walter Smith:** In the summer of 1926, Yupik Eskimo Walter Smith and his young apprentice Henry Wuya found placer platinum in a stream draining a remote, uninhabited coast of southwest Alaska. The GBMC eventually purchase Smith’s claims. Smith and Wuya are recognized as discoverers of Goodnews Bay platinum.

**Henry Wuya:** Henry Wuya was born to Eskimo parents in Quinhagak on the Yukon-Kuskokwim Delta. Wuya was proficient in English when few Yupiks knew English. He mentored with the older and experienced prospector, Walter Smith.

Fairbanks, Spring 2006

### **Honoring Two Pioneers Important to both Canadian and American Mining Communities**

**Ellen (Nellie) Cashman:** Ellen (Nellie) Cashman was a quintessential gold stamper who participated in many gold-silver rushes of the late 19<sup>th</sup> and early 20<sup>th</sup> Centuries. Nellie's final home was Nolan Creek in the Koyukuk district of northern Alaska. Cashman died in 1925 at St. Anne's Hospital, Victoria, British Columbia, a medical facility she helped found several decades earlier.

**Jack Dalton:** One of the premier horse freighters of the Alaska-Yukon gold rush era, Jack Dalton opened up the 'Dalton Trail' for prospectors and trades from Haines to Central Yukon, Canada. In later years he worked as a freight engineer for the Alaska railroad. The Dalton Highway is a tribute to the Dalton family in Alaska.

Juneau, Summer 2006

### **Honoring the Mining Legal Profession, in Cooperation with the History Committee of the Alaska Bar Association**

**Frederick (Fred) Eastaugh:** Nome-born Fred Eastaugh was an Alaskan accountant a ship's officer for the Alaska Steamship Company, and Alaska mining attorney. Eastaugh was appointed to the Alaska Minerals Commission in 1991 by Governor Walter Hickel. Upon Eastaugh's death a year later, Hickel ordered state flags flown at half mast.

Anchorage, Fall 2006

### **Honoring an Outstanding Statesman and an Outstanding Prospector Active in the mid-20<sup>th</sup> Century Alaska Mining Industry**

**Charles F. (Chuck) Herbert:** Chuck Herbert was one of the premier miners of his generation. Educated at the School of Mines in Fairbanks, he mined placer gold deposits, sought metalliferous lodes, and served with distinction in several public roles. During early years of Statehood, he played a crucial role in the selection of Alaska's North Slope Lands. Later as DNR Commissioner, he revitalized the State land selection process.

**Rheinart M. (Rhiny) Berg:** Berg's strength and stamina were legendary during most of his 86 years of life. He worked as an underground miner in the Wrangell Mountains and Fairbanks districts, as a trapper and prospector, and he found the Bornite copper-cobalt deposit. He later developed the Candle placer district on the Seward Peninsula. He gained great wealth, which he mostly gave away.

Juneau, Spring 2007

### **Honoring an Outstanding Statesman and a Mine Attorney Active in Southeast Alaska's Mineral Industry**

**Phillip R. Holdsworth:** Phil Holdsworth's professional career extended nearly seventy years. He was a practical miner at the age of sixteen. Later he operated mines, assay labs, and mills. In World War II, he defended a Philippine mine as a guerilla warrior. After serving as Alaska's first commissioner of Natural Resources, Holdsworth became Alaska's elder natural resource statesman before his death in 2001.



**Herbert L. Faulkner:** H.L. (Bert) Faulkner's law career extended for almost seventy years. He was a sheriff, U.S. Marshall and attorney. He would represent almost every major mining company operating in Alaska during his lifetime.

Fairbanks, Summer 2007

**Honoring Two of Alaska's Outstanding Mine Educators**

**Earl H. Beistline:** Earl Beistline had a distinguished career as mining educator at the University of Alaska in Fairbanks. Beistline brought to the classroom a unique blend of theoretical and practical knowledge in the field of mining. During all of his adult life, he has been a tireless and outspoken advocate of Alaska mining industry interests.

**Ernest N. Wolff:** Ernie Wolff was a notable personality on Alaska's mining landscape for more than sixty years. During this time he prospected, mined, taught and administered at the University of Alaska, wrote a classic book, *Handbook for the Alaskan Prospector*, and served on public bodies; all of this always in his unique style with a kind of gentle truculence.

Anchorage, Fall 2007

**Honoring Those involved in the Southwest Alaska's Quicksilver Mining Industry**

**Robert F. Lyman:** Besides operating small scale mercury lodes, he managed Alaska's largest mercury mine at Red Devil, Alaska, which, during the 1950s, produced nearly 20 percent of U.S. domestic requirements of the strategic metal.

**Wallace M. Cady:** Produced, with other USGS colleagues, 'The Central Kuskokwim Region, Alaska', a geological framework of a large, 5,000 mi<sup>2</sup> area centered on Alaska's premier mercury mining region.

**Russell Schaefer:** One of Alaska's 'tough guy prospectors' that accomplished much in the Kuskokwim Mercury Belt of southwest Alaska.

Fairbanks, Spring 2008

**Honoring Three Attorneys and a Civic Minded Woman Important to the Interior Alaska Mining Industry**

**Luther Hess:** First rate mining lawyer and active mine developer in several interior Alaska gold camps. Helped organize the Alaska Miners Association (in 1939) and served as AMA's first President.

**Harriett Hess:** Worked with husband Luther on a variety of mining education issues and was a pioneer regent of the University of Alaska system. Worked as pro-development, pro-mining Democrats during the Roosevelt Administration.

**Earnest B. Collins:** Pursued a long and successful career in Interior Alaska as a placer miner, lawyer, Alaska Territorial legislator, and delegate to Alaska Constitutional Convention.

**John (Johnny) McGinn:** A smart mining lawyer who, with James Wickersham, cleaned up corruption in Nome and financed many small gold and silver projects in Interior Alaska and Yukon, Canada.

Anchorage, Fall 2008

**Honoring Two Engineers and a Prospector Who Helped Bring Success to the Kennecott Mines in the Chitina Valley of South-Central Alaska**

**Earl Tappen Stannard:** An innovative engineer at Kennecott's Alaska mines, and later a CEO of Kennecott Copper Corporation.

**William Crawford Douglass:** A gifted mining engineer and exceptional manager at Kennecott's Alaska mines.

**Reuben Frederick McClellan:** Organized the mining partnership that made the initial discoveries and negotiated the sales of the mineral claims that became the Kennecott mines in Alaska.

Anchorage, Fall 2009

**Honoring Four Pioneers Important to the Willow Creek Mining District**

**Robert L. Hatcher:** Began the lode mining boom in the Willow Creek district when he discovered gold-quartz veins on Skyscraper Mountain that later became part of the Independence group of mines.

**Orville G. Herning:** Instrumental in forming the east-coast based exploration group, Klondike and Boston Gold Mining Company and in forming the Willow Creek Mining district.

**Byron S. Bartholf:** Represents a large family group that was instrumental in the development of the gold lodes in the Willow Creek district.

**Walter W. Stoll:** An exceptional mine operator of the Independence gold mine, which became the largest gold producer (in ore tonnage) in the Willow Creek district.

Fairbanks, Spring 2010

**Honoring Two Civic-Minded Mining Pioneers Important to Interior and Western Alaska Development**

**John P. Clum:** Long after his involvement with the capture of Geronimo in Arizona, Clum established reliable postal service in Alaska, and became the Postal Inspector of the Alaska Territory.

**Irving McKenny Reed:** Notable Associate Mining Engineer for the Alaska Territory and a pioneer of Nome; was Chair of the Alaska Game Commission prior to World War II and the Territorial Highway Engineer just before Alaska Statehood.



**Nicholas and Evinda Tweet at their home in Teller, circa 1919; photo from the Tweet family collection.**

**Nicholas B. Tweet  
(1871-1967)**

**Evinda S. Tweet  
(1879-1975)**

It is difficult to name any couple in Alaska mining history that has had more longevity and perseverance than Nicholas B. and Evinda S. Tweet. In marriage, they formed a team that created a remarkably stable, family owned, placer gold mining firm that continues to this day. Their company, N.B. Tweet and Sons, has operated placer gold mines on the Seward Peninsula of western Alaska for 110 years. Nicholas and Evinda worked their way through several placer gold mining camps, tried their hand at graphite mining, operated two bucketline stacker gold dredges, provided musical entertainment to the mining communities in which they lived and worked, interacted with North American (Inupiat) and Chuckchi Eskimos from their home in Teller, witnessed and participated in the dawn of the air age, and, finally, saw Alaska Statehood before their passing at Taylor in the Kougarok district.

Nicholas was 95 at the time of his death. Evinda passed away at the age of 96. In 2010, N.B. Tweet and Sons operated the only floating bucketline stacker dredge in North America.

Nicholas (Nick) and Evinda Tweet were of Scandinavian origin, their parents being immigrants from Norway, and both grew up in rural Minnesota. Nick, born August 14, 1871, was from Franklin, while Evinda S. (*nee* Lyders) Tweet, born May 16, 1879, was from nearby Sacred Heart. Both towns were small Lutheran farm communities in the Minnesota River Valley, about 150 miles west of Minneapolis. Franklin is sometimes referred to as the ‘Catfish Capital’ of Minnesota. Sacred Heart was and is a railroad transportation center used by local grain producers. Some also dub Sacred Heart the ‘Tornado Capital of the Land of Ten Thousand Lakes’, with more of the funnel-shaped clouds touching down within its jurisdiction than in any other Minnesota community.

Tornados didn’t chase Nicholas and Evinda out of Minnesota. Instead, the northern frontier beckoned them, and they would live and work there for the rest of their lives. An adventurous 23-year-old, Nicholas Tweet first came north in 1894. He hiked over Chilkoot Pass, and rafted down the Yukon River system to follow up on coarse placer gold discoveries made there by Howard Franklin eight years earlier. Nicholas, then a novice at mining, spent two years in the Fortymile district, where he mined and prospected, and eventually achieved a measure of success for his efforts. In the fall of 1896, gold was discovered in the Klondike, and Nicholas packed his gear and moved to Dawson, where he worked and mined until the spring of 1899. The *1898 Alaska-Yukon Directory* lists Tweet as a miner, but offers no other information.

The 1898 discovery of gold in the Cape Nome Mining district drew Nick Tweet to the Seward Peninsula. He left Dawson by sternwheeler, and traveled down the Yukon River, eventually

reaching Saint Michael, where he found out that he had to walk north several hundred miles along the beaches of Norton Sound to reach the new digging on the Seward Peninsula. On June 20, 1899, he arrived in Nome, which then consisted of several hundred tents, one saloon built with driftwood, and one log cabin. It was in this famous gold rush town that Nick finally succeeded handsomely in gold mining; he did very well capitalizing on the early phases of discovery and exploitation of the gold-laden, modern beach deposits. Buoyed with his success, Nicholas returned to Minnesota briefly, where he courted and then married Evinda Lyders in late 1899.

Nick returned to Nome in 1900, leaving Evinda in Tacoma, where their first two sons, Edgar and Norman, were born during 1900 and 1901. By the time Nick Tweet returned to Nome, nearly all of the good placer ground in the district had been staked, and the easy-to-mine beaches had become largely depleted of gold, including his previous beach placer holdings. Although gold was initially discovered there in 1898, the Nome Rush of 1900 was mainly a stampede to exploit those easy-to-mine beach deposits, and up to 20,000 adventure seekers ventured into the country, traveling from the communities of Dawson and Circle down the Yukon River to its mouth, and then by ocean steamer to Nome. Others came to Nome via Seattle or San Francisco, having originated in Canada, the 48 States, and beyond. Wages could still be made working for companies exploiting the more traditional upland stream placers on Anvil, Dexter, Snow Gulch, and other creeks in the district, but gold production around Nome remained stagnant until the 1905-1906 discovery of the fabulously rich, yet deeply buried, Third Beachline. Many disappointed miners and prospectors began to leave Nome for Stateside destinations, or ventured into other areas of the Peninsula. Tweet was of the latter group, and was willing to test new areas.

During 1900-1901, Nick Tweet prospected in the Kougarok and Fairhaven districts in the central portion of the Seward Peninsula. He constructed a small boat in Nome, and rowed to Teller, then up the Kuzitrin and Kougarok Rivers via the Imuruk Basin, and into the Fairhaven and Kougarok districts. In similar fashion he rowed up the Agiapuk River basin north of Grantley Harbor. For much of the time, he pulled the boat by hand, there being insufficient water to row. Nick did not find what he wanted in the Kougarok and Fairhaven districts, although the knowledge gained would provide important information for him and Evinda to consider later in their lives.

Gold placer discoveries in the Port Clarence district 70 miles northwest of Nome beckoned to Nick and Evinda Tweet. The Bluestone River basin became the first significant discovery, and several small paystreaks were successfully hand-mined during 1900. Shortly afterwards, during 1902-1904, small gold placers were found in streams north of Grantley Harbor, including Bay, Sunset, Igloo, Dewey, McKinley, and Offeld Creeks. Several towns sprung up on the shores of Port Clarence, the first being Bering. Sullivan was founded in the Bluestone River basin to the south. A newer town of Teller was formed near Bering, and became the more permanent community. Nick, Evinda, and their two young sons, Edgar and Norman, moved to Teller in 1902. From this base, the Tweet family would mine placer gold in the Port Clarence district for nearly a half century, or until 1947. Principally because of its good harbor, Teller became a favored hub for mining on the Seward Peninsula, despite being a rather modest producer of gold as compared to the Cape Nome and Solomon districts to the east. Saloons, honky-tonks, banks, stores, and hotels catered not only to miners, but also to sailors, whalers, and fisherman from the ships that called into port.



**The Tweet family in front of the family house in Teller, circa 1924; from left to right, Edgar, Nick, Evinda, Bill (child being held by Evinda), Norman, and Harold; photo from the Tweet family collection.**

When Elisabeth Pinson described her years growing up in Teller in her autobiography, *Alaska's Daughter*, she related many aspects of the economic and social life of that part of the Last Frontier:

*“The Tweet family became the last to operate during the great gold rush mining era in the Port Clarence region.....My father (Alfred Bernhardt) worked at several of their placer operations around Grantley Harbor.”*

Nicholas and Evinda Tweet, along with their sons, mined on Deese (a.k.a Dese), Gold Run, and Coyote Creeks southeast of Teller. In the early years, the family's gold mining operations were small-scale and largely non-mechanized, but due to the Tweets' resourcefulness and efficiency, N.B. Tweet and Sons quickly became an economic success. According to Pinson,

*“The way they [the Tweets] lived showed that they were*

*among the wealthier folk of Teller.”*

In addition to deploying their own family members in the mining of gold, the Tweets hired local people instead of bringing laborers in from outside sources, as was commonly done by mining companies of that era.

There was no clear-cut division of labor during the early years of the Tweet marriage. In addition to raising her four husky 'Norwegian' sons, Edgar, Norman, Harold, and William, Evinda diligently panned and prospected many creek drainages in both the Teller and

later Taylor areas, and usually cleaned up the gold from the concentrates of the mine operations. In her years on Deese and Coyote Creeks, she shoveled into sluice boxes alongside her husband and sons, and nozzled away overburden. Financial details of mine development, including property acquisition and 'greenfields exploration', were handled jointly by Evinda and Nick. They were an effective husband-and-wife mining team.



**Panning on Coyote Creek, Port Clarence District, circa 1921-1922; from left to right, Bill Tweet, Mrs. Reed, and Evinda Tweet; photo from the Tweet family collection.**

It was not ‘all work and no play’ in the Teller mining camp, and musically-inclined residents would perform in local dances, usually in an empty warehouse known as “The Woodbine’. Nick Tweet and his two oldest sons, Edgar and Norman, would play harmonicas; the elder Tweet would also keep the beat of the music with two spoons rattled together, and he was quite skilled at both. Another miner, Jim LaPierre, would play his violin. David Bernhardt would join in with both an accordion and sometimes a guitar, and the patriarch Alfred Bernhardt would also play an accordion. The favorite piece of Alfred Bernhardt, a naturalized citizen from Germany, was “Blue Danube”, but the group would also perform polkas, square dances, Virginia reels, and schottisches. When the group was not playing live music, they and others would listen to the powerful transmissions of KNX Radio in Los Angeles, which aired *National Barn Dance* on the weekends. During the long, cold winters, the Tweets taught the German-Eskimo Bernhardt family how to play card games, and some of these tournaments would last for days. In return, David and Tony Bernhardt showed Nick and Evinda Tweet and their sons how to play Eskimo football, known as *munna munna*. Ice sailing was another popular sport that the Tweets and Bernhardts participated in, and some of their ski-rigged boats were clocked at more than 30 miles per hour.

Situated on the shores of the Bering Sea, Teller has had a unique international perspective. The community is only about 100 miles from the Siberian coast, and quite literally, there are nearby localities where one ‘can see Russia from one’s house’. During the Bolshevik Revolution, refugees from that difficult period in Russian history were known to appear briefly in the town. Chukchi Eskimos from the Chukotka Peninsula would also appear, and interesting enough, could not speak or understand the dialect of the Inupiat Eskimo or vice versa. About the time that Evinda and Nick arrived in Teller, there was a robust trade in reindeer meat arriving from Chukotka, as natural populations of game in Alaska were sparse or in

decline, and could not meet the needs of the gold mining industry, or even local residents. This condition eventually led to the establishment of Alaska’s reindeer industry at about the same time. Arctic explorers would call into port at Teller, and local residents, including the Bernhardts and the Tweets, would visit with Raold Amundson, Italian Commander Nobile, and explorer Lincoln Ellsworth, who were aboard the world’s largest dirigible, *Norge*, during its top-of-the-world stop at Teller in 1926. Strong winds wrecked the *Norge* at Teller. Other explorers who ventured to Teller include Vilhjalmer Stefansson, and pilot Joe Crosson. The Tweets also felt first-hand the tragic loss of Carl Ben Eielson and Earl Borland, when the pioneer pilot and his mechanic suffered a fatal airplane crash off the coast of Siberia in 1929. Teller was the base of operations for the search, and the whole town participated in the attempted but unsuccessful rescue.

Events in Europe temporarily changed the Tweets’ direction in mining. World War I caused a strong demand for graphite, a non-metallic commodity used in lubrication applications for the war industry. High grade graphite deposits in the nearby Kigluaik Mountains (a.k.a. Sawtooth Mountains) east of Teller had been known since 1900, when claims were staked west of the Cobblestone River. A company called ‘Uncle Sam Alaska Graphite Mining Syndicate’ had produced some graphite there in 1912, but ceased production later that same year. Nick Tweet staked graphite-bearing mining claims, and then leased them to a company called the ‘Alaska Graphite Company’ in 1915, which subsequently mined and shipped approximately 500 tons of high grade graphite in 1916 and 1917, and a few more tons in succeeding years. Subsequently, Nick, Edgar, and Norman worked the claims for the company. Nick and his brother-in-law, Carl Lyders, also mined graphite on other claims at a small scale. In order to support the mine efforts, a bunk house and storage shed were built on Graphite Bay in the Imuruk Basin, and a three mile long road from Imuruk Basin to the mines sites on Glacier Creek was

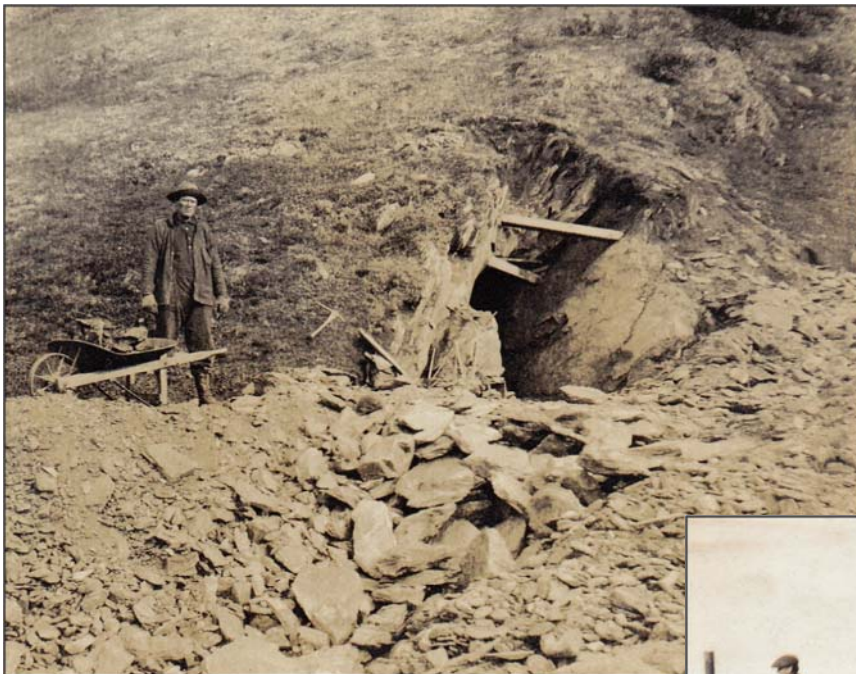
constructed. Alaska Graphite Company employed seven men to complete the seasonal (summer only) mining activities. Most of the graphite ore was conveyed from an open pit on the hillside to a loading station about 200 feet lower, using a hydraulic pipe 400 feet long and 8 inches in diameter. Hand sorting of high grade was completed at the pit, and was sacked there separately. Transportation from the mine to Graphite Bay was by trailers drawn by a small, gasoline-powered Holt™ tractor. This was certainly one of the earliest tractors to be used in the Alaska mineral industry, and predates another Holt™ and a Clectrac™ model used in the Kantishna and Iditarod districts, respectively, during the early 1920s. Holt would later merge with another firm, Best™, to form Caterpillar. The Holt gas tractor used to haul the Kigluaik graphite resides today at Taylor.

According to Harrington's 1919 summary, the best graphite mined in the Kigluaik Mountains was

*“Very high grade (up to 98% carbon), and comparable to high quality flake graphite deposits produced elsewhere; even the poorest material is regarded as good ore as compared to many commercial locations.”*

But cessation of international hostilities ceased in 1918, and the graphite market steeply declined, with resultant loss of market for the Tweets. By 1920, all of their graphite shipments had ceased. Interest in these high quality graphite deposits east of Teller resurfaced during World War II and the Korean War, and even recently. N.B. Tweet and Sons continue to maintain federal mining claims there.

The 1920s through the 1940s saw N.B. Tweet and Sons continue to mine placer gold near Teller, but the firm was increasingly aided by yellow machines of the modern, mechanized, placer mining vintage, and then by dredges. In 1927, the oldest Tweet son, Edgar, married the local school teacher, Mary Monagle. Several years later, Edgar started a successful store franchise in Teller. During the late 1930s, Edgar decided to greatly expand the store, and sold his mining interests to Nick and



**Graphite mining on Ruby Creek, Kigluaik Mountains, circa 1917; photo from the Tweet family collection.**

From Graphite Bay, the graphite ore was loaded into scows, towed to Teller, and then loaded onto ocean steamers bound for market destinations, mainly Seattle and San Francisco. The Tweet graphite production amounted to large bulk samples shipped to several market destinations.



**Graphite en route to Imuruk Basin during a test haul, circa 1917; Nick Tweet is seated on the wagon, the others are not identified; photo from the Tweet family collection.**

Evinda, his younger brothers, and other mining partners in order to concentrate on his store operations. During the 1930s, Nick, Evinda, and their three younger sons mined placer gold on Deese, Coyote, and Igloo Creeks. Territorial records show that N.B. Tweet and Sons operated a gold dredge on Deese Creek almost continuously during the 1930s, until it was shut down in 1938.

The second World War shut down gold mining throughout Alaska, and the operations of N.B. Tweet and Sons were not exempt. The elderly Nick Tweet, at age 71, served in the Alaska Territorial Guard as a Private. Joining him in the Guard was forty-year-old Norman, who served as a Sergeant, and forty-two-year-old Edgar, who served as a Lieutenant. The two younger sons, Harold and Bill, served on active duty in the Army. Bill served in Anchorage and Valdez, and Harold served in the Aleutians and in other parts of the Pacific Theater.

N.B. Tweet and Sons resumed mining after World War II, but moved in different directions. Their claims in the Port Clarence district were largely worked out, and the company began to search for new ground. In 1947, Bill and Harold married Muriel and Virginia Carpenter respectively, both of whom were also school teachers. That year, Nick, Evinda, Norman, Bill, Muriel, Harold, and Virginia spent the summer on a sort of combined prospecting and honeymoon trip. They traveled with D6 and D8 Caterpillar tractors, and covered roughly the same route that Nick had covered in the Fairhaven and Kougatok districts nearly 50 years previously. They found good pay on Humbolt Creek (now in the Bering Land Bridge National Monument), and mined there in 1948 and 1949. N.B. Tweet and Sons decided to move their operational headquarters from Teller to Taylor, and did so in 1950. The family continued to spend the winters in Teller until the late 1970s.

In 1936, Alaska Mining Hall of Famer John McGinn, along with Fairbanks financier Sam Godfrey, secured capital from Tacoma and San

Francisco investors to build a 2.0 cubic foot, Washington Iron Works bucketline stacker dredge for Kougatok Consolidated Placers (KCP) at Taylor. The dredge was placed into production by the end of the 1937 season, and it operated until 1939 or 1940. Financial difficulties ensued, and the partnership of Castleton and Keenan purchased the KCP dredge in 1940, and operated it until the untimely death of Keenan, the operator, who was killed in an airplane crash. The KPC dredge was shut down during World War II. After several more unsuccessful attempts to operate the dredge, by several different firms, N.B. Tweet and Sons acquired the KPC dredge assets from Grant Jackson of the Miners and Merchant Bank in 1951.

Nick, Evinda, and their sons were happy to acquire the KCP gold dredge, and recognized that a hefty gold resource lay in the large alluvial terrace at Taylor. For Nick and Evinda, who were long overdue for retirement, it was a way to continue the family tradition of placer mining. Their eldest son, Edgar, had passed away in 1948, but the younger sons, Norman, Harold, and Bill, began to plan for a long-term run with the dredge. The first year of gold dredge production in the Kougatok district by N.B. Tweet and Sons was 1953 or 1954; the firm also continued to mine with non-float and dragline methods.

During the 1960s, the fixed price of gold continued to take its toll on the Alaska gold mining industry. Almost all of Alaska's dredges, with the exception of two small boats operated by the USSR&M Company (and the Goodnews Bay platinum dredge), had shut down by 1963. N.B. Tweet and Sons temporarily reverted back to non-float mechanized mining on their Kougatok district properties. However, by the early 1970s, as related by Clark Spence in his classic book, *The Northern Gold Fleet*,

*“N.B. Tweet and Sons was again digging on Taylor Creek in the Kougatok District.”*

State of Alaska records, maintained by the writer throughout the 1970s to late 1990s, and then by



others since, show that N.B. Tweet and Sons' gold dredging activities have been more-or-less continuous ever since. The typical mine cycle for N.B. Tweet and Sons has been to prepare ground for mining one year, using first hydraulic and then mechanical stripping technology, and then to operate the dredge the following year. This cycle has worked very well for the Tweets. The length of time the dredge operates each season depends on how much ground was stripped during the previous year. When totaling the times of both the Deese Creek and Taylor dredges, N.B. Tweet and Sons has operated bucketline stacker dredges on the Seward Peninsula for more than 50 years.



**Nicholas Tweet nozzling at the Taylor Camp, circa 1956; photo from the Tweet family collection.**

Beginning in 2009, N.B. Tweet and Sons began to systematically rebuild all aspects of their Taylor dredge. New buckets were cast at a foundry outside of Alaska, and the substantial improvements have resulted in the fabrication of practically a brand new dredge. The wide alluvial

terrace at Taylor will provide years of reserves for the dredging operation. In 2010, the Tweet dredge was believed to be the only operating bucketline stacker gold dredge in North America.



**The KCP-Tweet dredge, ready to dig, circa 2010; photo from the T.K. Bundtzen collection.**

Nicholas and Evinda Tweet saw their Taylor dredge recover gold, but would not see their grandsons and great grandsons renovate the dredge. Nicholas B. Tweet died on July 14, 1967. Evinda followed on May 28, 1975. Nick was 95 at the time of his death, and Evinda was 96; both died at the family mining camp near Taylor. Son Norman died in 1977, Bill in 1981, and Harold in 1995. Nick and Evinda Tweet's grandson, Douglas Tweet, told the writer,

*“Our grandparents never made much money in mining, but they always paid their bills, raised a mining family in the North Country, and taught their descendents how to live and how to love the placer mining lifestyle. They never became wealthy, but somehow, through their inspiration, we, the Tweet family, have since mined continuously.”*

*By Thomas K. Bundtzen, October 2010*

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Panning on Coyote Creek, Port Clarence district, circa 1921-1922; from left to right, Edgar Tweet, unidentified, Bill Tweet (squatting in center), and two unidentified women; photo from the Tweet family collection.



**Carl S. Glavinovich,**  
undated; photo from the  
Glavinovich family  
collection.



**Walter A. Glavinovich,**  
undated; photo from the  
Glavinovich family  
collection.

### **Carl S. Glavinovich (1906-1980)**

### **Walter A. Glavinovich (1909-2002)**

Collectively, brothers Carl S. and Walter A. Glavinovich devoted more than one hundred years of their lives to the prospecting, deciphering, drilling, thawing, and mining of the Nome, Alaska, gold fields. Most of those years were in the service of one company, the U.S. Smelting, Refining, and Mining Company (USSR&M). Carl and Walter were at Nome during its start-up period from the late 1920s through the early 1930s, then throughout its hey-day, when multiple dredges profitably mined more than 30,000 cubic yards of material every day. Their stay extended into the difficult period of operation after World War II, when escalating mining costs and a fixed price of gold finally caused the Nome dredges to stop operations in 1963. It was never easy. Dredges burned or sank, the season was too dry or too wet, evaluation of the richness of placer ground was almost as much an art as it was a science, and pennies made a difference. Carl and Walter Glavinovich, neither of whom had college degrees in engineering as did many company managers, gradually moved up within the company. They learned every skill by doing, and their hard work,

innovation, mechanical abilities, analytical minds, and years of experience were recognized when USSR&M put them in charge of its Nome and other property operations in the post World War II years. The brothers faced the difficult task of operating the mines profitably during an inflationary period that saw a fixed price for their product, placer gold, and they did it very well.

Carl Stephen Glavinovich was born on July 1, 1906 in Split, Yugoslavia, to Roman Catholic parents Paul and Matija Glavinovich. Split, also called Spalato for its Italian name, is the major seaport of Croatia (Yugoslavia). It was a common point of departure to the New World in the early part of the Twentieth Century. Carl's brother, Walter, was born in Split three years later on August 2, 1909. In 1910, the Glavinovich family immigrated to the United States, settling in the Pacific Northwest. The two boys graduated from public high schools, and Carl was in attendance at the University of Washington in a pre-med program when he decided to try to earn enough money to pay for his education by working in Alaska. Carl went north in 1925, while Walter was still attending Ballard High School in Washington State. Carl enjoyed his Alaska experience enough to return to Nome in 1926, and a would-be doctor was converted to a life-long miner. After his high school graduation in 1927, Walter followed Carl to Nome to the same result: a lifetime in Alaska.

Chronologically, the Glavinovich brothers fall in the middle of the mining history of the Nome district. In the fall of 1898, the Three Lucky Swedes, Lindeberg\*, Brynteson\*, and Lindblom\* made the first critical placer gold discoveries in Anvil and Glacier Creeks. Although there was not enough valuable ground in those creeks to meet demand, the situation altered when gold was discovered in the beach sands that extended for miles along the coast. The beach discoveries resulted in Alaska's major gold stampede, from 1900 to 1902. The stampede made ordinary miners wealthy, but the shallow placer gold on the beaches was soon gone. The next discoveries were

the richest yet; gold was discovered in ancient buried beaches. With the assistance of Charles Lane\* and his Wild Goose Mining Company, Lindeberg and his partners organized the Pioneer Mining Company, and, over the next two decades, mined much of the remaining high grade buried beach sands with the aid of miles long water ditches (some engineered by James K. Davidson\*), hydraulic giants, and gravel elevators.

Around 1913, US Mining (which became USSR&M), a Boston-based company with hard-rock mines in western North America, began to consider dredge mining the remaining Seward Peninsula placer gold. The company learned that small dredges could dig shallow, thawed ground, but not the deep, frozen ground that contained the major gold reserves. USSR&M had no interest in small mines. During the late teen years of the century, a new process using cold water to thaw frozen ground was developed, and it appeared that mining in deep frozen ground could be profitable. America's "dredger king", Wendell P. Hammon\*, decided to tackle Nome. In the mid 1920s, Hammon, with backing from USSR&M, installed two large dredges at Nome. Unfortunately, cold-water thawing, which worked on a small scale, was not effective in the deeply embedded frozen ground at Nome. Hammon had to call on USSR&M for assistance, which led to the reorganization of his own company, Hammon Consolidated Gold Fields, as a wholly owned subsidiary of USSR&M. USSR&M transferred an exceptional mining engineer, Roy Earling\*, to Nome to take charge of its operations there.

When Earling arrived in Nome, he found a former pre-med student, Carl Glavinovich, and his younger brother, Walter, ready to work on the thawing project. The Glavinoviches arrived in Nome during the time when cold-water thawing was being converted from a theoretical method to a practical mining method. Carl and Walter were innovative and hard working, and provided invaluable assistance to USSR&M engineers Roy Earling, Jim Crawford\* (who arrived in Nome in

May, 1929), and Jack Boswell\*, in developing practical cold-water thawing techniques.

The Glavinovich brothers were also adept at the evaluation of the gold content of dredge ground. Geologically, the recognition of fossil beaches and their complex relationships with alluvial deposits and with the great gold field where Anvil Creek flowed out from the mountains drew the interest of both Glavinovich brothers. Both men contributed their geologic knowledge to the classic study of the Nome placer deposits by J. B. Metcalfe and Ralph Tuck, and also to the studies of government scientists, especially David Hopkins, a geologist with the US Geological Survey, and John J. Mulligan, an engineer with the US Bureau of Mines. Carl and Walter spent hours discussing the origin of the placer gold fields with the trained scientists.

Both men stepped into family life in Nome. Carl married Marguerite Johnson, but not before courting with a bang. Carl had to dynamite Marguerite's house to create a fire-break during a fire in which much of downtown Nome burned. Carl's reputation, well deserved, was that of a miner who sometimes worked around the clock, but he made time to assist in the revitalization of the Nome Kennel Club (NKC). The Club, at its strongest in the days of Iron Man Johnson and the annual races from Nome to Candle before World War I, was reorganized to aid the present day Iditarod race. Carl remembered that as a young man in 1925, he had been a member of the NKC when the Club gained worldwide fame on the Diphtheria serum run.

Walter, also noted for his devotion to his job, married Canadian born (September 14, 1903) Elma Galvin. Carl and Marguerite had one son, Paul, who followed his father into the mining field, and two daughters Caroline and Ruth who, like their mother, became teachers. Walter and Elma had two daughters, Helen (Enyeart) and Alice (Ehli), both living today. Walter, besides devotion to his

job, spent hours in garden and greenhouse “where the quality of his produce was beyond belief.”



**Carl S. Glavinovich, undated; photo from the Glavinovich family collection.**

In 1928, USSR&M’s engineer, Roy Earling, left Nome to accept a position as Manager of Operations of the Fairbanks Exploration Company (FE Company), the name under which USSR & M operated in the Fairbanks area. Carl and Walter Glavinovich remained at Nome.

Although there had been great practical difficulties in mining at Nome in the 1930s, economics improved for the Nome dredges after the 1934 increase in the price of gold. New dredges were added, and some years were very profitable. In 1935, the Glavinovich brothers had been given more responsibility, water for dredging was abundant, and the company put on a third dredge. Total production on the Seward Peninsula was over \$1 million more than the preceding year. Another good year followed, when the dredges worked 186 consecutive days in 1936. Also in 1936, Hammon Consolidated Gold Fields, the wholly owned subsidiary of USSR&M, officially

became the Nome Department of the United States Smelting, Refining, and Mining Company.

Managing profitable and successful mines requires skills beyond the mechanical. As World War II approached, staffing dredge crews became problematic. All positions: professionals, oilers, men on the thaw lines, became harder to fill. One solution that was adopted early-on at Nome was the training and employment of local Natives, who were promoted as their seemingly natural mechanical abilities were developed. Both Carl and Walter advocated employment of local Natives, and were more sympathetic than some Alaskan mining managers to subsistence needs. It was necessary to have some creative scheduling, but the result was often long-term employment. Conditions continued to worsen, however, with the impending war. Men had other employment options, and material shortages began to emerge. In 1942, most gold mining operations were closed by government order L-208.

Mining operations recommenced slowly after the war, and faced challenges in employee recruitment of both skilled and unskilled labor. Although legally the dredges could have begun operations in 1946, inventories and dredges had to be rebuilt. They were not on line again until 1948. Criticism of the environmental impacts of dredging for placer gold, which had been muted in the early years, increased during the post-war operating period. Walter entered the battle of words, when he pointed out that differences on the results of dredging were largely a matter of perspective. According to Walter, dredging improved the land that had previously been permanently frozen: “Isn’t it exciting to watch a settlement grow where once permafrost, polluted bogs and pesky insects once thrived [referring to the Fox area north of Fairbanks].”

In 1952, there was a major shakeup at USSR&M’s Alaska operations. Earling reached retirement age. Jim Crawford succeeded Earling, and became Vice-President of USSR&M and General Manager

of all Alaska operations. Carl became Manager of Operations at Nome with Walter as his deputy. Walter also took much of the load in management of the outlying camps at Hogatza River in the Koyukuk region, and Chicken Creek in the Forty Mile district.

Although economic conditions were difficult, another dredge was added to the Nome fleet, Dredge No. 6, which began to work the Submarine Bench where the good pay was below sea level. Dredge No. 6 was built from parts salvaged from Dredge No. 3, which capsized in its pond in 1953. In 1963, economics finally forced the Nome fleet to shut down.

employees from local villages, such as Hughes. It was quite remote, which may have contributed to its successful operation, as there were few employment alternatives. The operations at Chicken and Hogatza were under the direct supervision of Walter Glavinovich. He provided some interesting comments on the movies that USSR&M chose to send to its remote camps for their crews entertainment. Westerns were preferred. Mysteries, musicals, and comedies were appreciated occasionally. But, as Walter put it, by no means send English films, “. . .as these are definitely not appreciated.” Hogatza operated for USSR&M until 1976, and was back on line for other companies during, and after, the 1980s, when the price of gold escalated. Dredges No.5 and No. 6 in the Nome district were restarted in 1973 and worked until 1995.

Carl and Walter Glavinovich maintained company operations at Nome as long as feasible. Carl retired in 1971, and mined successfully on Glacier and Anvil Creeks. His last clean up was from a pit only one-quarter of a mile from the original discovery on Anvil Creek. As Carl's son Paul remarks, “He just knew there was more gold there.” He died, a respected man and miner, on May 4, 1980 in Anchorage, Alaska.



**Dredge No. 6, circa 1990; photo from the T.K. Bundtzen collection.**

The two smaller dredge operations on the other properties continued. From 1959 to 1967, more than \$2 million in gold was dug from the small, high-grade placer deposit at Chicken, but under difficult conditions, ranging from damage to the dredge during startup operations to the loss of employees due to the recruitment of firefighting crews by the US Bureau of Land Management, which offered higher pay than the mining company could afford to. With the shut down of the Chicken Dredge in 1967, the only dredge left operating in Alaska was USSR&M's other small dredge at Hogatza River. Hogatza was entirely a post World War II operation, and had a large contingent of



**Carl S. Glavinovich operating hydraulic equipment in the Nome district, with Anvil Mountain in the background, undated; photo from the Glavinovich family collection.**

In 1981, Walter was recognized by the School of Mineral Industry, University of Alaska, Fairbanks, with a Distinguished Service Award. The award was primarily for his contributions to dredge technology, especially thawing methods. Walter Glavinovich died on September 6, 2002 in Washington State after a long period of gradually declining health.

Carl and Walter Glavinovich were innovative and hard working, and with their assistance, USSR&M engineers were able to develop practical cold-water thawing techniques and successfully evaluate the gold content of dredge ground, which helped set the pattern for the economical mining of perennially frozen ground in northern Alaska for the next forty years. Cost effective cold-water thawing allowed the economic development of the major dredge fields at Nome and Fairbanks, Alaska. Nome and Fairbanks could have ended up as ghost towns; instead they prospered throughout the depression and beyond, and the Glavinoviches were part of the reason.

*By Charles C. Hawley, October 2010*

*\*Previously inducted into the Alaska Mining Hall of Fame*

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**Dredge No. 5 in operation on 3<sup>rd</sup> Beach, circa 1957. Dredge No. 5 was the largest on-land gold dredge ever to operate in Alaska. Photo from the T.K. Bundtzen collection.**

**Distinguished Alaskans Aid  
Foundation as '98ers**

The Alaska Mining Hall of Fame Foundation was incorporated as an Alaskan non-profit corporation on April 27, 1997. The Foundation was organized exclusively for educational and charitable purposes, including donations to organizations that are tax exempt under Section 501(c)(3) of the federal tax code. On September 17, 2003, the IRS confirmed the 501(c)(3) status of AMHF, and further categorized the organization under codes 509(a)(1) and 170(b)(6).

The foundation is a non-membership corporation that depends on services provided by its officers and directors, others interested in Alaskan mining, and on donations and grants.

The Foundation is especially indebted to twenty-one (21) persons who have each contributed \$1,000 to become 98ers, in honor of the first stampedeers to Alaska in 1898 at Nome.

**The 98ers**

Dr. Earl Beistline Cheryl R. Bradley Thomas K. Bundtzen Glen Chambers Douglas Colp Wendell Hammon Jr. Dr. Charles C. Hawley Dr. Walter Johnson Wallace McGregor Neil McKinnon James Moody	John Mulligan Patrick H. O'Neill Elmer E. Rasmuson (d) Irving Stoy Reed William Stroecker Dr. Robert H. Trent Mitch Usibelli Joe Usibelli, Sr. Dr. William Wood (d) Dr. Kenneth L. Zong
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(d=deceased)

Most of the 98ers are recognizable as miners of national or international reputation. The late William R. Wood was President, Emeritus, of the University of Alaska. Dr. Wood suggested the organization of the Foundation. The late Elmer E. Rasmuson was an Alaska banker and benefactor, long interested in Alaska natural resource history. Dr. Walter Johnson's career was mainly in Native public health, but he knew many pioneer Alaskans. His own research has taken him to Sweden and Norway in search of the true story of the so-called "three Lucky Swedes" of fame at Nome.

The Foundation is seeking about ninety more 98ers, but it welcomes contributions at every level. For further information contact:

Wallace McGregor Chair, Finance Committee 1212 N. Washington, Ste 12 Spokane, WA 99201	Karl Hanneman Treasurer 626 Second St., Ste 201 Fairbanks, AK 99701
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