

The PAYSTREAK

Volume 22, No. 1, Fall, 2022

The Newsletter of the Alaska Mining Hall of Fame Foundation

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Alaska Mining Hall of Fame Foundation New Inductees

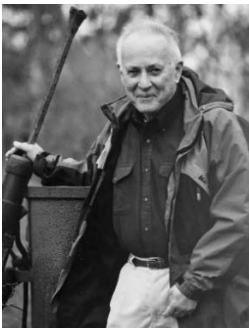
AMHF Honors Three Visionary Pioneers Associated with Modern Mine Development



John Qipqina Schaeffer Jr. was born in 1939 to a large family that lived a very traditional subsistence lifestyle in Northwest Alaska. Whether it was being the first Inupiaq two-star general and Adjutant General of the Alaska National Guard, the first President of NANA Regional Corporation, the first mayor of the Northwest Arctic Borough, or President of the Alaska Federation of Natives, John was a visionary, compassionate, and effective leader. His main mining credentials stem from him leading NANA into the successful negotiation of the complex agreement with then Cominco Limited (Cominco) in October 1982, which led to the development of Red Dog mine, today one of the world’s largest producers of mined zinc—a critical mineral. The agreement NANA signed with Cominco provided for extensive protection of subsistence, including the right to shut down the operations if it negatively impacted subsistence resources. Alaska is a much better place for John being able to navigate successfully in two different cultural worlds.



Charles G. (Riz) Bigelow is widely recognized as one of the most successful mineral exploration geologists in Alaskan history. His success stemmed from his ability to organize and lead many excellent economic geologists into making significant mineral discoveries across the 49th State. Riz began his Alaska career in 1952 working as a young deckhand aboard USSR&M gold dredges near Fairbanks. After obtaining a BS Degree in Geology from Washington State University, Riz joined Bear Creek Mining Company/Kennecott in 1959 as a junior geologist at the Bornite project in the western Brooks Range. Later, exploration projects he designed resulted in the discovery of the world class Arctic copper-polymetallic deposit, as well as other similar mineral deposits in the Ambler Mineral belt. After leaving Kennecott in 1972, he formed Anchorage-based WGM Inc., which went on to help make discoveries at Greens Creek, Pogo, and many other Alaskan properties, some of which are now operating mines.



Charles Caldwell Hawley Born in Evansville, Indiana in 1929, Hawley was one of most respected and beloved individuals among Alaska’s mining fraternity. Chuck first came to Alaska in 1967 to work as a USGS geologist in Glacier Bay National Monument. Hawley left the USGS in 1969 and moved his family to Anchorage, and started the consulting business, C.C. Hawley and Associates. Chuck led the fight to keep highly mineralized lands from being incorporated into national conservation units during the d-2 debates of the 1970s. He organized the first Alaska Miners Association (AMA) annual convention in 1976 and was AMA Executive Director in 1978-79. Chuck became involved in small-to-mid-sized gold mine projects throughout Alaska. Hawley was a founding member of the Alaska Mining Hall of Fame Foundation. Chuck wrote two authoritative books on mining history and won the 2015 *Alaska Historian of the Year Award*.

**And Alaska Mining Hall of Fame Foundation (AMHF)
Induction Ceremony, November 9th, 2022
Mariott Hotel, Anchorage, Alaska**

Program

The general public is invited to Alaska Mining Hall of Fame Foundation (AMHF) induction ceremony from 7:00-to-9:30 PM on Wednesday, November 9th, 2022. The ceremony will take place in the Marriott Hotel in Anchorage, Alaska.

Power Point Presentations will be presented of all three inductees. There is no charge for admission. Refreshments (coffee and tea and cookies/donuts) will be served.

Coffee and Donuts-----	7:00-to-7:15 PM
Introduction by Tom Bundtzen AMHF-----	7:15-to-7:30 PM

Presentation of Inductees

Presentation of John Schaeffer Jr., by John Shively-----	7:30-to-8:00 PM
Presentation of Riz Bigelow by Tom Bundtzen-----	8:00-to-8:30 PM
Presentation of Chuck Hawley by Rob Retherford-----	8:30-to-9:00 PM
Coffee Break-----	9:00-to-9:15 PM
Recollections of Inductees from the General Audience-----	9:15-to-9:30 PM
Adjournment-----	9:30 PM

Introduction and Acknowledgements

The November 9th, 2022 induction ceremony of the Alaska Mining Hall of Fame Foundation (AMHF) features three 'heavy weights' involved in mineral exploration and development in the formative years after Alaska Statehood. Their contributions cannot be understated, because their actions, either as successful discoverers of significant mineral wealth, as decision makers in moving forward an important project (Red Dog), or as facilitators of sound public policy, helped form the backbone of the Alaskan mineral industry that we see today.

John Schaeffer Jr. grew up in an impoverished rural setting in northwest Alaska; yet succeeded in many pursuits. He was the first Inupiaq two-star general and Adjutant General of the Alaska National Guard, the first President of NANA Regional Corporation, the first mayor of the Northwest Arctic Borough, or President of the Alaska Federation of Natives. He understood the need to protect the region's cultural values; yet at the same time, the need to provide for locally generated wealth from which many would benefit. By pushing for the development of the Red Dog mine, those goals were accomplished. Some have said that without Schaeffer's resolute support for the project, the Red Dog mine may have never been developed.

Riz Bigelow was the quintessential exploration geologist. Beginning his career in Fairbanks during territorial times, his success stemmed from his ability to organize and lead many excellent economic geologists into making significant mineral discoveries across the 49th State. The mineral deposits later became mines that form much of Alaska's mineral industry today.

Chuck Hawley began his geological career in Colorado, working on uranium, beryllium and specialty metal resources for the U.S. Geological Survey. He subsequently began work with AMHF Inductee Ed MacKevett working on mineral studies in Southeast Alaska and the Wrangell Mountains. Chuck brought his family to Alaska in 1969 to start a new career in consulting. Chuck worked on mineral exploration projects all over the state but is perhaps best known for leading his efforts to prevent highly valuable mineral lands from being absorbed into national conservation units during the d-2 debates of the 1970s, and for his leadership role in the Alaska Miners Association. He is also known best for his authoritative books on AMHF inductee Wesley Dunkle and a succinct history of the Kennecott Mining Corporation, the latter of which has received national recognition from the historical community. We at AMHF also know him as a founding board member of this organization and a close friend.

John Shively wrote the biographic sketch of John Schaeffer Jr. Tom Bundtzen wrote the biographic sketches of Riz Bigelow and Chuck Hawley, obtaining much information for both from many colleagues that worked with them and from selected published sources. Rob Retherford, Mitch Henning, Ted Hawley and Harold J. Noyes reviewed the biographies. Bundtzen prepared the Newsletter for publication.



Contributions to the AMHF

The Alaska Mining Hall of Fame Foundation is funded through donations of money, time and effort, and through sales of books and other paraphernalia. The Foundation is a tax-exempt organization, so all donations are tax deductible.

Donations to the Foundation should be mailed to:

Karl Hanneman, Treasurer
Alaska Mining Hall of Fame Foundation
P.O. Box 81108
Fairbanks, Alaska 99708

Contributions to the Foundation

Contributions help the Foundation produce, publish and update the AMHF website, and operate our new museum at 406 Cushman in downtown Fairbanks (see accompanying article). We were able to reproduce all *Paystreak* Newsletters from 1997-to-Present. The thirty-seven (37) *Paystreak* newsletters can be downloaded from the website, which is:

www.alaskamininghalloffame.org

We thank all contributors, regardless of the level of their donation, which are: Copper (\$1-\$99), Silver (\$100-\$499), Gold (\$500-\$999); '98er, (\$1,000) and Platinum (>\$1,000). Some of the more recent contributions have been in memory of legislator, and placer gold miner Robert Bettisworth, gold miner Walt Wigger, and mine educator Jim Madonna. The AMHF especially thanks Teck Resources, operator of the Red Dog Zinc-Lead-Silver Mine, the Usibelli Foundation, Margaret Cox Rich, Taiga Mining Company (Taiga), the Bill Stroecker Foundation, Larry and Darlene Peterson, June and Norman McAtee, and Dave and Pat Carnes for their generous donations during the last several years. Also included below are those that have contributed through the Pick-Click-Give Program by year.

Name	Contribution Level	Dedication	Year
Lynden Transport	Gold	General	2013
Teck Resources Red Dog Mine	Platinum	General	2013
Doug Colp Family	98er/Gold	General	2013
Jason Brune	Silver	General	2014
Malie Gray	Copper	General	2014
Clark Milne	Copper	General	2014
Peter Montesa	Copper	General	2014
Jules Tileston	Copper	General	2014
Six Anonymous	Silver	General	2014
Usibelli Foundation	Gold	General	2014
Candy Waugaman	Platinum	General	2015
Karen Erickson	Copper	General	2015
Usibelli Foundation	Platinum	General	2015
Alaska Women in Mining	Gold	General	2015
Brian Rogers, Sherry Modrow	Gold	General	2015
Marty K. Rutherford	Gold	General	2015
Karen Purdue	Gold	General	2015
Mr. and Mrs. Jim Thurman	Silver	General	2015
Karen Clautice	Copper	General	2015
Christine and Corbette Upton	Silver	General	2015
Bill Brophy	Copper	In Memory of Bob Bettisworth	2015
Leo and Fredi Brown	Copper	In Memory of Bob Bettisworth	2015
George Horner-Trust	Silver	In Memory of Bob Bettisworth	2015
Laurence Peterson	Silver	In Memory of Bob Bettisworth	2015
Sigwald and Arlene Strandberg	Silver	In Memory of Bob Bettisworth	2015
Laurence Peterson	Gold	In Memory of Jim Madonna	2015
Lisa and Milton Behr	Gold	In Memory of Walt Wigger	2015
David and Aldean Kilborn	Silver	In Memory of Walt Wigger	2015
Nathaniel May	Copper	General	2015
Michael Whelan	Silver	General	2015
Aaron Pfeil	Copper	General	2015
Clark Milne	Silver	General	2015

Name	Contribution Level	Dedication	Year
Karen Lapp	Copper	General	2015
Jeff Lapp	Copper	General	2015
Bill Stroecker Foundation	Platinum	General	2015
Clark Milne	Silver	General	2016
Joel Stratman	Copper	General	2016
Michael Whalen	Silver	General	2016
Richard Hughes	Silver	General	2016
Karen Lapp	Copper	General	2016
Patricia Peirsol	Copper	General	2016
Matthew Hanson	Copper	General	2016
Jason Brune	Silver	General	2016
Jeff Lapp	Copper	General	2016
John Cook	Copper	General	2016
Mark Hottman	Copper	General	2016
Two Anonymous	Silver	General	2016
Sarah Isto	Silver	General	2016
Tom Bundtzen	Silver	General	2016
Chris Olsen	Silver	General	2016
David and Heidi Doudna	Gold	General	2016
Karen Purdue	Gold	General	2016
Karen J. Erickson	Platinum	General	2016
Richard E. Wagner	Copper	General	2016
Harold and Leslie Noyes	Gold	General	2016
Karen Clautice	Copper	General	2016
Winston and Glenda Burbank	Silver	General	2016
Joseph and Victoria LeTarte	Silver	General	2016
Richard and Cherie Solie	Silver	General	2016
Debbie and Jeff Johnson	Silver	In Memory of Walt Wigger	2016
Helen Warner	Copper	General	2016
Laurence and Darlene Peterson	Silver	General	2016
John and Arlene Orbeck	Copper	General	2016
Lyman Family	Silver	General	2016
Ruth Ibbetson	Silver	General	2016
Alaska Women in Mining	Gold	General	2016
Bill Stroecker Foundation	Platinum	General	2016
Usibelli Foundation	Platinum	General	2016
Jason Brune	Silver	General	2017
Patrick Dolphin	Copper	General	2017

Name	Contribution Level	Dedication	Year
Matthew Hanson	Copper	General	2017
Richard Hughes	Silver	General	2017
Sonny Lindner	Copper	General	2017
Clark Milne	Silver	General	2017
Jerry Sadler	Copper	General	2017
Joel Stratman	Copper	General	2017
Terry Taylor	Copper	General	2017
Michael Whelan	Silver	General	2017
3 Anonymous	Silver	General	2017
Bill Stroecker Foundation	Platinum	General	2017
Usibelli Foundation	Platinum	General	2017
Fairbanks Branch, Alaska Miners	Gold	General	2017
Don Gray	Copper	General	2018
Richard Hughes	Silver	General	2018
William Kinne	Copper	General	2018
Clark Milne	Silver	General	2018
Patricia Peirsol	Copper	General	2018
Michael Whalen	Silver	General	2018
Jason Brune	Silver	General	2018
Matthew Hanson	Copper	General	2018
Mark Hottman	Copper	General	2018
Jamison Parry	Copper	General	2018
Jerry Sadler	Copper	General	2018
Usibelli Foundation	Platinum	General	2018
Terry Taylor	Copper	General	2018
Bill Stroecker Foundation	Platinum	General	2019
Larry and Darlene Peterson	Silver	General	2019
Jason Brune	Copper	General	2019
Matthew Hanson	Copper	General	2019
Gay Ellen Heath Griffin	Copper	General	2019
William Kinne	Copper	General	2019
Clark Milne	Silver	General	2019
Jameson Parry	Copper	General	2019
Patricia Peirsol	Copper	General	2019
Jerry Sadler	Copper	General	2019
Michael Whalen	Silver	General	2019

Name	Contribution Level	Dedication	Year
Margaret Cox Rich	Platinum	In Memory of Ray Smith	2020
David and Patricia Carnes	Platinum	General	2020
Larry and Darlene Peterson	Platinum	General	2020
Taiga Mining Company	Platinum	General	2020
Scott Bothwell	Copper	General	2020
Jason Brune	Silver	General	2020
Don Gray	Copper	General	2020
Matthew Hanson	Copper	General	2020
William Kinne	Copper	General	2020
Clark Milne	Silver	General	2020
Heath Nowak	Copper	General	2020
Jameson Parry	Copper	General	2020
Patricia Peirsol	Copper	General	2020
Jerry Sadler	Copper	General	2020
Michael Whelan	Silver	General	2020
Bill Stroecker Foundation	Platinum	General	2021
Taiga Mining Company	Platinum	General	2021
Phil Younker	Silver	In Memory of Ray Smith	2021
Anonymous 1	Silver	General	2021
Anonymous 2	Silver	General	2021
Larry and Darlene Peterson	Silver	General	2021
Rob and Donna Brady	Copper	General	2022
Jason Brune	Silver	General	2022
Patrick Dolphin	Copper	General	2022
Matthew Hanson	Silver	General	2022
Richard Hughes	Silver	General	2022
William Kinne	Copper	General	2022
Clark Milne	Silver	General	2022
Jameson Perry	Copper	General	2022
Patricia Peirsol	Copper	General	2022
Jerry Sadler	Copper	General	2022
Anonymous 1	Silver	General	2022
Anonymous 2	Silver	General	2022
Teresa Chepoda	Silver	In Memory of John Usibelli	2022
Ann and Mike McCann	Silver	General	2022

Bolded years (2021, 2022) are new listings not included in our last Newsletter. Note that 2021 contribution listing is incomplete; current as of 10/31/2022.

In Remembrance—Paul S. Glavinovich and Joseph E. Usibelli Sr.

The year 2022 brought to the Alaska Mining Hall of Fame Foundation sadness as two long standing board members passed away. Paul Stephen Glavinovich (1939-2022) was born in Nome as the son of a dredge master operating gold dredges for the USSR&M Company. In 1961 He graduated from the University of Alaska School of Mines in Fairbanks with a BS Degree and later returned to the same institution for an MS degree in 1967. Paul has been active in Alaska’s mining industry since that time and devoted to the Alaska Mining Hall of Fame (AMHF) Foundation since its founding in 1997. He served as Statewide President of the Alaska Miners Association and was very active in mineral exploration projects throughout the 49th State. He was an important player in the early development of Greens Creek Mine, when he managed for Noranda Exploration, the operator of their successful exploration efforts. Besides reviewing and writing numerous biographic sketches of AMHF Inductees, Paul has been the anchor of the organization during induction ceremonies held in Anchorage, arranging for Board Meetings there and various induction ceremony venues. He leaves behind wife Jacqui, daughter Mikel Glavinovich, granddaughter Zoe, grandson Ryder, and son-in-law Damian Want.

Joseph E. Usibelli Sr. (1938-2022) was born in a log cabin in Suntrana, Alaska, a coal mining center near Healy, Alaska. He was the son of Emil Usibelli, founder of Usibelli Coal Mine, Inc. After his father was killed in a mine accident in 1964, Joe Sr. took over the operations, which has been in continuous production producing steam coals for domestic Alaskan and international buyers more than 80 years. Joe was a beloved philanthropist that has been an outstanding representative of the Alaskan mining community. Joe built display cases for AMHF exhibits on the riverboat Nenana in Pioneer Park in Fairbanks. He was later involved in working with a small placer miner that leased placer ground donated to the AMHF in the Circle district. Joe Sr. provided ‘solid business advice’ on how to operate this non-profit organization. Joe leaves behind his wife Peggy Shumaker, his first wife Shelly Reed, their six children, and many grand kids.

Both these individuals will be sorely missed.



Paul S. Glavinovich Undated



Joseph E. Usibelli Sr. Undated

AMHF Museum Project Completed--Opening on October 8th, 2022

After several years of delays caused by the COVID-19 epidemic and other construction issues, the new Alaska Mining Hall of Fame Foundation Museum was opened on October 8th, 2022 in Fairbanks at 406 Cushman —right next to McCafferty’s Coffee shop and near the old historic City Hall—now a distillery-- where the Alaska Miners Association was incorporated in 1939. The new museum first took shape in the fall of 2019, when building owner Charles Cole and AMHF President Tom Bundtzen signed an agreement to lease 3,550 square feet at what was Carrs Clothing Store—and before that—the ‘OWL’ grocery store. The original museum at 1st and Cowles was limited to 1,800 square feet of usable space.

The initial design of the new museum was carried out by architect David Hayden of L64 Designs. After receiving several required permits from several City and State officials, the new museum was built by Fairbanks contractors Paul and Jackie Boyd. P. J. Gesin provided mobile display and storage units, and several groups donated display cases, including the estate of Jim and Leah Madonna, the Railroad Museum at Pioneer Park, and the Pioneers of Alaska Igloo #4. Volunteers who helped open the museum included Fairbanks historian Joan Skilbred, Paul Metz (UAF Professor Retired), Cheryl Bradley (CPA), Zebadiah Fannin (UAF Graduate Mining Engineer), Justin Akaka (USAF Airman), Ozzie Osborn (Seward Pioneers of Alaska Men’s Igloo #9), Wanda Huber and Marilyn Russell (Fairbanks Pioneers of Alaska Women’s Igloo #8), Tim Beck (Fairbanks Pioneers of Alaska Men’s Igloo #4), and AMHF President Tom Bundtzen. Lynden Transport donated a crew to haul stored materials to the new site. Many of the displays from the previous museum were modified and repaired; new displays are being constructed.



LEFT--Charles Cole, owner of the Cole Building at 406 Cushman, inspects the 2022 remodeling efforts: RIGHT Construction in March 2022.

The new museum is heated by ‘waste heat’ from the Aurora Energy Power plant in downtown Fairbanks, as is the rest of the Cole Building Complex. The AMHF will be selling books that describe Alaskan mining history; many featuring AMHF inductees. In addition, various paraphernalia including coffee cups, T-shirts depicting pioneers, and past AMHF newsletters will be available for purchase. The October 8th opening had about 70 people in attendance. Governor Mike Dunleavy cut the ribbon that opened the museum (see photo).



Governor Mike Dunleavy (left of photo) prepares to cut the ribbon of the new AMHF museum, October 8, 2022.



The new AMHF museum at 406 Cushman showing the inductee biographic sketches on display.

At the new museum, about 130 biographic sketches appear in alphabetical order on the mobile display units—so that friends and relatives of inductees can easily find them. The pioneers are also keyed to displays on the walls, which link pioneers with major events in Alaska’s mining history. In addition, an archive is being built that will feature donated files from many Alaskan mining pioneers. Hence our work has just begun. The new museum features a state-of-the-art lazer theatre, for which high quality video renditions of mining history documentaries will be viewed. The popular Wednesday Evening Lecture Series began in the old museum will be restarted at the new museum. A number of non-profits have expressed interest in using the museum for some of their events.

Unlike the previous museum, the AMHF intends to keep visitation hours of the AMHF museum year-round. Beginning in early November, the AMHF museum will be open from 12:30-to-4:30 PM Monday through Friday. Hours will be expanded beginning May 1st to accommodate the tourist season. For further requests for arranging for museum visitation, contact the President at 907-388-6607.

Previous Inductees, Alaska Mining Hall of Fame

Fairbanks, Fall 1997

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 during Alaska-Yukon Gold Rush Era.

Ernest Patty: University of Alaska renowned teacher and later president, and manager of dredge firms in the Coal Creek-Woodchopper district.

Clarence Berry: Prominent Klondike and Interior Alaska miner.

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” grubstaked many prospectors.

Arthur Harper: Respected trader and prospector and promoter of the Yukon; his son Walter, first stepped foot on the summit of Mount McKinley (Denali).

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

John Minook: Creole-Athabaskan prospector who discovered the Rampart and Melozitna districts—became an important inspiration for Indigenous rights, including US Citizenship.

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 20th 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 district character.

Juneau, Spring 2001

Induction Ceremony Honoring Early Government Role in Mining

Benjamin D. Stewart: State and Federal mining administrator, mine safety proponent, 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: Water engineer that 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 20th 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-20th 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: was born to Eskimo parents in Quinhagak on the Yukon-Kuskokwim Delta. Wuya was proficient in English when few Yupik people 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 19th and early 20th Centuries. Nellie's final home was Nolan Creek in the Koyukuk district of northern Alaska. Cashman died of Cancer 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, named after his son, another transportation pioneer, 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-20th Century Alaska Mining Industry

Charles F. (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.

Rheinhart 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 discovered 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. Faulkner was an important lobbyist during the early years of the Alaska Miners Association. 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 was 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 mi² 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. Hering: 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 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 throughout Alaska—he became the Postal Inspector for the Alaska Territory.

Irving McKenny Reed: Notable Associate Mining Engineer for the Alaska Territory and pioneer of Nome; was chair of the Alaska Game Commission prior to WWII and the Territorial Highway Engineer prior to Statehood.

Anchorage, Fall, 2010

Honoring Pioneers Important to the Seward Peninsula Gold Dredging Industry

Nicholas B. and Evinda S. Tweet: Partners in marriage and mining, they created a family-owned firm that has mined gold in Alaska for more than 100 years.

Carl S. and Walter A. Glavinovich: Brothers who devoted more than 100 years of their collective lives to dredging in the Nome district, one of Alaska’s Premier placer gold districts.

Anchorage, Fall, 2011

Honoring Two Pioneers Active in South-Central Alaska Mining and Economic Development

Martin Radovan: A Croatian prospector who prospected the Chitina Valley for decades and found the high grade but also high altitude ‘Binocular’ copper prospect. He never made a mine but his dreams live on.

Arthur Shonbeck: He joined numerous stampedes during the Alaska-Yukon Goldrush and was an outstanding civic leader of Anchorage. He drowned with AMHF Inductee John Beaton in Ganes Creek west of McGrath.

Fairbanks, Spring 2012

Honoring Pioneers Important to the Mid-20th Interior Placer Mining Industry

Oscar Tveiten: Arrived in Fairbanks during the Great Depression and mined on Cleary Creek in the Fairbanks for more than 50 years.

Glen D. Franklin: A gifted athlete who studied business administration at the University of Alaska in the 1930s; mined with others throughout Alaska and Yukon Territory for several decades.

Donald Cook: An Oregon-born graduate of the University of Alaska, who pursued a stellar career in Education at the University of Alaska-Fairbanks. He was an expert on USSR&M Gold dredges.

Anchorage, Fall, 2012

Honoring Pioneers Important to the Iditarod and Innoko Districts of Southwest Alaska

Merton Marston: Indiana newspaper man who became wealthy as a result of grubstaking the discoverers of the Iditarod district—later managed hotels in the Pacific Northwest.

Mattie ‘Tootsie’ Crosby: Beloved personality in Flat, the center of the Iditarod district for more than 50 years—the only Afro-American who lived and worked in that district.

Toivo Rosander: Finnish immigrant who mined in the Ophir-Innoko area for 70 years with wife Dyna and boys Ron and Ken. Managed to convince many skeptics about the economic and social value of placer mining.

Juneau, Spring, 2013

Honoring Two Pioneers Important to Mineral Development in Southeast Alaska

Alexandre Choquette: French Canadian prospector who began in the 1849 California Gold Rush and ended in the Klondike Gold Rush of 1896. At the time of his death, Choquette was a true north-country legend.

John F. Malony: Was important to early mineral development of Southeast Alaska—served as mayor of Juneau and helped form Alaska Electric Light and Power, Alaska’s first modern electric utility.

Fairbanks, Summer 2013

Honoring an outstanding citizen, educator and placer mine expert

Doug Colp: Born and raised in Southeastern Alaska, Colp Became a legendary expert on placer mine technologies, a UAF Educator, and, with his wife Marcel, a civic-minded resident of Fairbanks.

Anchorage, Fall, 2013

Honoring Geologists from the U.S. Geological Survey

Arthur C. Spencer: Provided the first geologic descriptions of the Kennecott Mines in the Chitina Valley and authored a classic: USGS Bulletin 287—The Juneau Gold Belt—in 1906.

Josiah E. Spurr: Forged a career as a renowned economic geologist—and helped found the Society of Economic Geologists. Best known for his pre-Klondike adventure--*Through the Yukon Gold Diggings*.

Stephen R. Capps: An outstanding regional geologist that specialized in the study of Alaskan placer gold deposits in glaciated areas. Was among the first federal geologists to study ‘strategic minerals’.

Fairbanks, Spring 2014

Honoring Three Early Mining Pioneers Important in the Alaskan Mining Industry

‘Wise Mike’ Stepovich: Self-educated Montenegro immigrant came to Fairbanks shortly after the 1902 discovery and mined gold on Fairbanks Creek for 40 years; his son Mike Stepovich II would be Alaska’s last territorial governor.

Helen Van Campen: Had a remarkable career in Alaska that included equestrian sports, journalism and gold mining. Helen Van Campen Memorial Scholarship Fund at the University of Alaska-Fairbanks has provided journalism students with funding to help start their careers.

Peter Petrovich Doroshin: A Russian Mining engineer that discovered placer gold on the Kenai Peninsula in 1848; was a pioneer in investigating Alaska's abundant coal resources.

Anchorage, Fall, 2014

Honoring Three Pioneers Associated with the Kennecott Mines in Alaska

Alan Mara Bateman: Important Kennecott consultant at McCarthy; Editor of *Economic Geology* for more than five decades.

Edward M. MacKevett Jr. Pioneer geologist of Kennecott deposits near McCarthy and Alaska's premier mercury-antimony and REE-Th-U districts.

William H. Seagrave Best known for his management skills in the early Kennecott mines of Alaska.

Anchorage, Fall, 2015

Honoring Pioneers Associated with the Red Dog Zinc-Polymetallic Mine and a Hatcher Pass Pioneer

Robert (Bob) Baker: The Kotzebue-based bush pilot and amateur prospector who is given credit for the discovery of the Red Dog zinc-polymetallic deposit, currently Alaska's most important metal mine.

Irv Tailleir A legendary U.S. Geological Survey Brooks Range geologist who followed up on Baker's recommendations and wrote the open-file report documenting the importance of the Red Dog deposit.

Don S. Rae: Respected prospector and assayer who worked in Southeast Alaska and Hatcher Pass.

Fairbanks, Spring, 2016

Honoring Pioneers Associated with Alaska's Gold Dredging Fleet

Patrick H. O'Neill: Born into a large Cordova family of Irish descent, O'Neill would graduate from the University of Alaska with several Engineering degrees, become dredge superintendent for the FE Company in Fairbanks, and complete a remarkable career operating fleets of gold-platinum dredges in South America. He was a strong supporter of the University of Alaska for his entire life.

Walter W. Johnson: His firm, the Union Construction Company, would construct one third of all the bucketline stacker dredges to operate in Alaska (32). UCC would operate in other international locales.

Anchorage, Fall, 2016

AMHF Honors Three Pioneers Associated Placer Mining, Invention, Mineral Industry Management, Scientific Inquiry, and Public Service

John Arthur Miscovich: Renowned second-generation placer gold miner from the Iditarod Mining district; John was perhaps better known for his *Intelligent*TM and other water technology inventions.

Cole Edwin McFarland: combined the hard work of a pioneering Alaskan placer mining family with the responsibilities of being President of Placer Dome U.S. Inc., a successful international mining firm.

Donald John Grybeck: had a distinguished career as a scientist, teacher, miner, and earth science manager. His lasting legacy is the USGS Alaska Resource Data Files (ARDF), which he designed.

Fairbanks, Spring, 2018

AMHF Honors Three 'Minority' Mining Pioneers

William T. Ewing: was born into slavery in 1854 in Keytesville, Missouri. After working his way across the United States, Ewing joined the Tacoma Police Department. He stampeded to Alaska in 1896, and in 1903, struck it rich in the Fairbanks District with partner James McCarty. After he passed away in 1923, his entire estate went to the Tuskegee Institute in Alabama.

Kate Kennedy: lived in the copper mining boomtown of McCarthy, Alaska for nearly three decades. In the early 20th Century, Kate Kennedy, a divorced woman, became the largest property owner in the Chitina Valley and was McCarthy's best known entrepreneur.

Eugene Swanson: was reported to be the only consistently successful gold miner in the Rampart District, according to a 1938 article by the Fairbanks Daily News Miner. He served as a Buffalo Soldier during the Alaska Yukon Gold Rush. An honor guard of black soldiers from the U.S. Army attended his 1942 funeral in Fairbanks.

Anchorage, Fall, 2018

AMHF Honors Frontier Mining Camp Pioneers

Joseph B. Quigley: Born in Pennsylvania, Joe Quigley would ascend Chilkoot Pass in 1891, years before the Klondike Gold Rush. Quigley is best known for his work in the Kantishna District in the shadow of Mount McKinley (now Denali).

Tekla M. Kanari: was a Finnish Immigrant who, along with husband John, formed and operated Trinity Mining Company in the remote Kougarak Mining district north of Nome. She made many wire transfers of funds to relatives and friends in war-torn Finland during WWII.

Alvin H. Agoff: Son of a Russian immigrant, Alvin Agoff mined gold, trapped, and freighted with sled dogs in the Iditarod Mining district for more than 50 years. His family legacy lives on with Prince Creek Mining Company, the last heritage mining operation in the Iditarod.

Anchorage, Fall 2019

AMHF Honors Pioneers of the U.S. Bureau of Mines (USBM)

Thomas L. Pittman: was a noted metallurgist, and minerals officer for the U.S. Bureau of Mines in Juneau; at the time of his passing, was the longest serving employee of the USBM in Alaska.

John Joseph Mulligan: Born in New York, Mulligan arrived in Alaska in 1949 and worked in the Territory on many strategic mineral projects in Alaska. He became Chief of Field Operations for the USBM in Alaska in 1970, a position held until his retirement in 1985.

Donald Paul Blasko: came to Alaska as a USBM new petroleum resource officer, and managed USBM studies during D-2 Lands debates; played a role in the Red Dog deposit discovery verification.

Fairbanks, Summer, 2020

AMHF Honors Pioneers Associated with Interior and Northern Alaska Gold Mining

Roshier Creecy: Born in Virginia in 1866, he sought to escape a southern Culture intent on retaining racial hierarchy. Roshier was a Buffalo Soldier in the 9th Calvary and later mined in Wiseman district of Northern Alaska for decades.

Arnold Nordale: The civic minded mining engineer was born in Juneau in 1896 and grew up in Fairbanks. Nordale worked for the Alaska Road Commission and ultimately the USSR&M dredging company in Fairbanks and the Yukon Consolidated Gold Corporation in Dawson—managing a dredge fleet of similar size to the USSR&M fleet in Fairbanks.

Raymond L. (Ray) Smith: Born and raised in Maine, Smith came north to Alaska in 1939 and obtained a mining engineering degree at the University of Alaska in Fairbanks. He became President of Michigan Technological University in 1965, and maintained ties with friends and colleagues in Alaska for the rest of his life. He died in Arizona at the age of 101.



John Schaeffer Jr.
Photo Courtesy of NANA

John Qipqina Schaeffer Jr. **(1939-2016)**

John Qipqina Schaeffer, Jr. was born in 1939 and passed away in 2016 at the age of 77. If there is a single word to define John Schaeffer Jr., it would be “leadership”. Whether it was being the first Inupiaq two-star general and Adjutant General of the Alaska National Guard, the first President of NANA Regional Corporation, the first mayor of the Northwest Arctic Borough, or President of the Alaska Federation of Natives, John was a visionary, compassionate and effective leader.

Early Years

He was the son of John and Annie Schaeffer who had 11 other children of which John was the eldest. They lived in and around Kotzebue and John Sr. lived a very traditional subsistence lifestyle most of the time. In a 1998 interview with A. J. McClanahan, John Jr. paints a picture of life in rural Alaska:

“I was the first child of what ended up being a large family. My parents had twelve children, ten of whom are still alive. We lived in a small, two-room house, basically. There was no electricity, no sewer and water;

no fuel oil (laughs), no trees--not in Kotzebue....we would get up in the morning to get the stove going, usually with wood. Later on, when we started hauling coal, we used a combination of wood and coal.....And then we went off to school. We had a BIA school. At that time, it was a two-room school, at least for the first couple of years. I think in the 4th grade, we moved into a four-room school.”

John Jr. never graduated from high school. He would later recall:

“The nearest high school that we could go to when I was ready was Mt. Edgecumbe (in Sitka, Southeast Alaska) and that’s where I went along with kids all over the State. So it was a good place to meet people that you later worked with on ANCSA and other things. But it was also difficult because you had to leave home in the fall and fly all of the way down to the other end of the State. If you were lucky, you could get back home and spend the summer there—I wasn’t so lucky so I spent two years at Mt. Edgecumbe in a row.....Us unlucky ones, we worked on the garbage trucks and mowed lawns and busted up boulders for the summer. But other than that, it was a good life.”

He left Mt. Edgecumbe after his junior year. John obtained his GED so that he could join the Alaska National Guard at the age of 17. After his basic training he went to NCO school, but when the military tested him, he was immediately sent to Officer Candidate School and became an officer at the age of 18.

Schaeffer had a distinguished career in the National Guard rising to its highest position in Alaska, but his dedication to his home region in northwest Alaska played an important role in Alaska history. Under the influence of his uncle, Willie Hensley, he became a founding member of the Northwest Alaska Native Association (abbreviated NANA), the group formed to work with the Alaska Federation of Natives (AFN) to fight for the settlement of Native land claims.



John Schaeffer Jr. in the uniform of the Alaska National Guard; undated photo. Photo Credit—John Shively.

Schaeffer's Connection to Mining

John's earliest connection to mining goes back to the 1940's when his father would go off to work in placer gold mines in the Candle district on the northeastern part of the Seward Peninsula south of Kotzebue. However, John's main mining credentials stem from him leading NANA into the successful negotiation of the complex agreement with then Cominco Limited (Cominco), which led to the development of the Red Dog mine.

Mining was of interest to NANA from its inception. The history of the Candle district where John's father worked at small placer gold mines, and the exploration work in the Ambler district were well known at the time NANA was formed. Later work began at the Lik zinc-lead-silver deposit (see biography of Riz Bigelow in this newsletter) near where the Red Dog Mine is today. NANA's executive leadership toured the villages to assess their vision and concerns for the future. One concern was mining, and it was clear that people in the region were largely suspicious of mining as an industry. The concerns were based on the possible impact on subsistence resources, other possible environmental effects, and the history of western resource development activities bringing very little positive economic gain to Native people.

In 1977, representatives of the mining industry came to Kotzebue to meet with John and other members of NANA's leadership. They told NANA that there was a very impressive prospect known as Red Dog about 90 miles north of Kotzebue. The prospect was first recognized by pioneer aviator Bob Baker of Kotzebue and U.S. Geological Survey geologist Irv Tailleir, who reported his findings in a 1970 USGS open file report. Editor's Note—both Baker and Tailleir were inducted into the Alaska Mining Hall of Fame in 2016.

The Red Dog prospect was then inside a d-2 withdrawal and being considered for inclusion in the proposed Noatak National Park. Members of the mining industry believed that they would not be able to persuade Congress to leave the Red Dog prospect outside the boundaries of the park, but that NANA might be able to. NANA was able to convince Congress that the prospect should be excluded from the park and were also able to obtain the right to select the lands around the prospect in the final version of the Alaska National Interest Lands Act (ANILCA).

Having gained the right to own the prospect, John, Robert Newlin (Chairman of NANA's Board), and the NANA staff were left with two major tasks. The first was to work with NANA shareholders to see if their concerns could be addressed and the second was to select a mining company to be their partner. John's leadership was crucial in both of these efforts. After an extensive process of reviewing proposals from a number of mining companies, NANA signed an agreement with Cominco Limited on October 11th, 1982 to develop the Red Dog deposit.

The agreement NANA signed with Cominco was groundbreaking in many ways. It provided for extensive protection of subsistence, including the right to shut down the operations if NANA could show a negative impact on the subsistence resources. Among many other provisions, the agreement also mandated hiring of NANA shareholders and gave a preference in contracting for NANA businesses.

By the time the agreement with Cominco was signed, people in the NANA region started to recognize that somethings needed to change if jobs were to be created for local people. John and his executive team at NANA spent considerable time working with elders and visited all of the villages in the region to explain the agreement. These interactions were important as they changed the positions of many NANA residents on mining, which allowed Cominco to develop the Red Dog mine, now one of the world’s largest producers of mined zinc—a critical mineral.

Epilogue

John grew up in a situation that western society would see as impoverished. However, his family and others instilled in him the rich cultural values of the Inupiaq.

It is the understanding of and the belief in these values that drove this high school dropout to the highest level of military leadership and to leading a fledging institution to combine Inupiaq cultural values with western business practices that resulted in Red Dog being the success it has been for the NANA Region and the entire state. John was one of a kind, and Alaska is a much better place for him being able to navigate successfully in two very different cultural worlds.

John remained in Kotzebue with his wife Mary for the rest of his life. At the time of his passing, John Qipqina Schaeffer Jr. left behind his wife of 56 years Mary, 10 children, 53 grandchildren, 100 great-grandchildren, and 6 great-great-grandchildren.

Written by John Shively; Reviewed by Tom Bundtzen



From left to right, Alaska Governor Bill Sheffield, Senator Frank Ferguson, Representative Al Adams, Willie Hensley, and John at the ground-breaking ceremony of the Red Dog mine (undated); Photo Courtesy of NANA.



John and Mary Schaeffer at their Ivik subsistence camp, undated. Photo from John Shively files



Riz Bigelow undated. From family files

Charles G. (Riz) Bigelow

May 2, 1931-to-August 5, 2018

Longtime Alaskan resident Charles G. (Riz) Bigelow passed away on August 5th, 2018 in Lewiston, Idaho at the age of 87. Riz was born in Barre, Vermont on May 2, 1931 and was one of four children born to Vernon and Marcella Bigelow. After his high school graduation, the Bigelow family moved from Vermont to Washington State. Bigelow is widely recognized as one of the most successful mineral exploration geologists in Alaskan history. His success stems from his ability to organize, lead and stimulate many excellent economic geologists into making significant mineral discoveries across the 49th State. He himself also participated directly in the search for ore bodies as a technical geologist.

Early Years in the Mining Industry

In 1952, Riz began his Alaskan mining career

in Fairbanks, when he became an employee of the United States Smelting Refining and Mining Company (USSR&M), which was operating a large gold-dredging fleet in the Fairbanks area. The 21-year-old Riz would become a fledging shoreman on Dredge #8 in Goldstream Valley and later on Dredge #5, then on Eldorado Creek. During his employment with the USSR&M dredge crews, he became fascinated with complex interactions of the overall gold mining activities, including the operation of the Davidson Ditch, which brought in water for hydraulic stripping and sluicing, the electrical crews from Fairbanks supplying power to the dredge, and the dredge operations themselves. Riz witnessed several cleanups onboard the dredges and later the pouring of gold bars, which took place at USSR&M headquarters in Fairbanks. In later years, he fondly remembered many of the old timers such as Paddy, Old Crow, Whiskey Bob, Blacky, Scotty, 'the Finn', and 'Shake-em-up'; it seemed to him that they had no last names! All were finishing off their careers with the USSR&M dredge fleet. The fixed price of gold (at \$35/ounce) was predictably dooming the large dredge fleets at Fairbanks, Nome, and in the Klondike of Yukon, Canada and many other smaller dredging firms throughout Alaska and Northern Canada. By the early-to-mid 1960s, all of the dredges would be shut down due to the fixed price of gold—those in Fairbanks and in the Klondike--permanently.

After the 1952 mining season ended in Fairbanks, Riz enrolled as a geology student at Washington State University, earning a BS in Geology. His first job upon his return to Alaska was working on a biogeochemical nickel-copper research investigation in southeastern Alaska. Besides suffering through the wet and soggy conditions of field work, Bigelow learned much about geochemical sampling concepts, which would prove invaluable during his later years in mineral exploration throughout Alaska. Upon completion of the nickel-copper investigation, he became active in uranium exploration in the

western states. By 1958, the 'Uranium Boom', which employed hundreds of exploration geologists nationwide, collapsed, and Bigelow found himself out-of-work. Bigelow retooled and helped engineer dam and tunnel locations for hydro-electric projects in Washington State, based out of Bellingham.

Bigelow's Kennecott/Bear Creek Mining Company Career

Fortune would shine on Riz in 1959, when Russell Chadwick, a major consulting geologist for Bear Creek Mining Company (Bear Creek), the exploration arm of Kennecott Copper Corporation (Kennecott), offered Riz a temporary job at a then little-known copper prospect at Ruby Creek (Bornite) in northwest Alaska. Kennecott had operated limestone-hosted copper mines in the Wrangell Mountains for decades, which were famous for their high copper content. In fact, this is where the company was founded. Due to a combination of economics and ore depletion, Kennecott shut down the famed mines in the Chitina Valley in 1938.

During the mid-1950s, Kennecott sent a large technical team to Alaska headed up by AMHF inductee Alan Mara Bateman to assess the feasibility of reopening their abandoned mines in the Wrangell Mountains. After deciding that it was not feasible to resume mining there, Bateman's team became aware of the newly discovered, limestone hosted, high grade copper deposits at Ruby Creek (Bornite) in the western Brooks Range. In the mid-1950s, after noting some general geological similarities to the past high grade copper mines in the Wrangell Mountains, Kennecott decided to acquire Bornite from AMHF inductee Reinhart Berg and several other junior partners, including Jack Bullock of Kotzebue and AMHF Inductee Charles C. 'Chuck' Herbert then of Fairbanks. In the 1940s-early 1950s, Berg had initiated an exploration program in the Cosmos Hills area, which included core-drilling into copper-rich zones.

Kobuk River pioneers Tony and May Bernhardt, Al Stout and Oro Stewart would variously involve Bigelow in small scale placer gold and nephrite jade mining ventures at Dahl Creek. But his main assignment as a junior geologist with Bear Creek involved a myriad of tasks including surveying, rock sampling, camp construction, core handling, personnel management and electrical wiring projects. His duties expanded to include all aspects of modern mineral exploration, including down-hole surveying and new computer-based analysis of the high-grade copper-bearing zones. Besides copper, zinc, lead, cobalt, silver, and trace uranium were also encountered in the Ruby Creek system. From 1960-1963, Riz personally logged thousands of feet of core and, with other colleagues, worked out the geological model of the carbonate reef structures which hosted the high-grade copper mineralization at Ruby Creek.

In 1964, Kennecott, the parent company of Bear Creek, took over the Bornite project and conducted advanced exploration and development activities on the property until 1968. Kennecott contracted Seattle-based B&R Barging to freight mining equipment up the Kobuk River from the coast and constructed a 15-mile-long road to Ruby Creek from the Kobuk River. For four years, Kennecott hired nearly 200 employees to work at Ruby Creek—many from northwest Alaska. Kennecott first initiated a major shaft sinking (to 1,075 feet depth) to carry out engineering studies at the main Ruby Creek prospect. During the same time, Kennecott's subsidiary, Bear Creek, began a regional exploration program of not only other limestone-bearing regions in the Cosmos Hills but also exploration in the practically unexplored southern Brooks Range. Bigelow was appointed Bear Creek's district geologist for those efforts.

Riz Bigelow became an economic geologist when new scientific theories about the origin of continents and metallic mineral deposits greatly influenced the mining industry's approach to mineral exploration. The now accepted plate tectonic theory provided for predictive

metalogenic models on how and where mineral belts existed in the earth's crust. For example, knowledge on how mineral deposit types related to the formation of island arcs (porphyry copper-molybdenum; base metal 'VMS' massive sulfides) and base metal mineralization in sedimentary basins within tectonic rifts ('SEDEX' deposits) were used as predictive tools by exploration firms on where to focus their search for mineral endowment. During his career, Bigelow and colleagues utilized modern plate tectonic theory to focus the search for mineral resources. His innovative ideas and unrelenting hard work led to the discovery of numerous mineral deposits of gold, copper and other commodities; several of them are now in commercial production.

Riz, along with many colleagues and enlightened managers, including Paul Bailly, Harry Burgess, Norm Lutz, Doug Cook, Clint Degenhart, Russ Babcock, Richard (Dick) Walters, Joe Ruzicka and many others would begin to find additional promising copper prospects, the first, what is now known as 'Omar', about 100 miles west of Ruby Creek. Utilizing his geochemical expertise acquired during his work in Southeast Alaska, Bigelow discerned that subtle, elevated copper values in stream sediments delineated a copper-bearing belt in metamorphosed schist extending from Walker Lake on the east to Omar on the west, a distance of more than 100 miles. He and others at Bear Creek also recognized that regionally metamorphosed schist in the trend contained felsic metavolcanic buildups interpreted to be components of a regional magmatic (island?) arc, which could conform to areas hosting the now defined Kuroko volcanogenic massive sulfide base metal deposit model (VMS) recognized worldwide.

Bigelow's exploration crews focused on areas where elevated copper values in stream sediments corresponded with felsic, meta-volcanic buildups in the schist section. By 1967, a number of volcanogenic massive sulfide deposits were discovered in what became known as the Ambler Mineral Belt.

Highlighting all this was the 1965 discovery of the Arctic deposit, a world class concentration of copper, zinc, gold, and silver coincidentally just north-northeast of the Ruby Creek (Bornite) area. Bigelow would later extend Bear Creek's exploration into the northeastern Seward Peninsula and the Chandalar District northeast of Wisemen near the Dalton highway, where promising, high grade copper skarn and porphyry deposits were discovered and drill-tested.



Riz Bigelow on a claim staking program in the Ambler Mineral Belt, circa 1970s. Credit Paul Skillingstad

By 1968, Kennecott pulled in its horns in northwest Alaska. Technical difficulties with shaft sinking at Bornite caused by strong artesian water flow, which flooded the shaft, stopped engineering studies. Coupled with uncertainties about transportation and energy infrastructure issues and lower copper prices, Kennecott pulled out, but left Bear Creek to continue regional exploration. Yet the world-class copper (and cobalt) asset at Bornite/Ruby Creek was not forgotten and the Bornite and Arctic deposits are currently being aggressively explored and developed by Ambler Metals LLC. From 1968-70, Riz would initiate grassroots exploration programs in Prince William Sound and the Alaska Peninsula regions for Bear Creek. He attended Harvard Business School under Kennecott sponsorship in 1971.

Bigelow's WGM Inc. Career

After thirteen (13) loyal years with Bear Creek and Kennecott, Riz Bigelow left the company in 1972 to found WGM Inc., an Anchorage-based

consulting firm, which was originally a subsidiary of Watts, Griffis and McQuat of Ontario, Canada. For decades, Riz would design well financed and well thought out exploration programs throughout Alaska. Under Bigelow's direction WGM Inc. clients included Native Regional Corporations, combinations of small to larger scale mining companies interested in regional or focused exploration, and government organizations, many of those contracts with the U.S. Bureau of Mines. Space does not allow for detailed analysis of the numerous projects undertaken by WGM Inc. under the direction of Bigelow. A few are highlighted below.

Riz was instrumental in the 1974 formation of the Pan Sound Joint Venture, an exploration consortium that included Noranda Exploration, Marietta Resources International (Marietta), Exalas Resources, and Texas Gas Exploration. Noranda became operational manager. Riz assumed the lead role in planning a regional analysis of the mineral potential of Southeast Alaska. After reviewing the geologic framework of the region, Bigelow's team surmised that a significant metavolcanic bearing section of presumed Triassic age occurred in the Hyde Group of the Alexander Terrane exposed in the Southeast Panhandle. The Triassic magmatic arc outcrops nearly continuously from southern Prince of Wales Island to Haines, a distance of about 300 miles. Using the same assumptions and exploration philosophy as deployed in the Ambler Mineral Belt, work by the Pan Sound Joint Venture focused in areas that contained a combination of elevated base metals in stream sediment accompanied by rock lithologies indicating the presence of meta-volcanics. One such target area was on Admiralty Island near Hawk Inlet.

In 1977, a prominent iron oxide gossan named 'The Big Sore' was first noted by geologists Bill Block and Joe Dreschler on northern Admiralty Island. The Big Sore was the surface manifestation of the Greens Creek polymetallic deposit, one of the highest grade, volcanogenic massive sulfide (VMS) deposits ever found.

The 1980 ANILCA Act allowed for development of the Greens Creek deposit, which is in a non-wilderness portion of Admiralty Island National Monument. Anaconda Minerals would acquire the interest in Greens Creek previously held by Marietta in 1983. First placed into production in 1989 by Kennecott-Greens Creek Mining Company, the deposit continues to yield sulfide concentrates for overseas markets by current operator/owner Hecla-Greens Creek Mining Company. Greens Creek mine is the nation's largest silver mine as well as a significant producer of zinc, lead and gold. Geologist Tom Andrews dedicated the Big Sore discovery to Riz Bigelow to honor his involvement in the overall success of the Pan Sound Joint Venture exploration program.



Greens Creek mill as it appeared in 1996. Credit: Tom Bundtzen

Besides continuing his successful career with discovering new Alaskan ore deposits, Riz Bigelow would often say that his most gratifying experiences were his firm, WGM Inc., assisting newly formed Alaska Native Regional Corporations in the prioritization of their lands for mineral endowment granted to them under the 1971 Alaska Native Claims Settlement Act (ANCSA). In 1972, Murray Watts of Watts Griffis and McQuat Inc. introduced Riz to the leadership of Doyon Limited, the large regional native corporation based in Fairbanks. Riz would ultimately assist Doyon in the review of more than 50,000 square miles of selected lands in more than 20 separate blocks. By 1975, WGM Inc. mounted a major search for mineral endowment in interior Alaska.

Doyon acquired from WGM valuable information for hundreds of townships, which aided their land selection decisions.

One property of note was the Slate Creek asbestos deposit in the 40 Mile District. Originally released in an open file report by U.S. Geological Survey geologist Helen Foster, Doyon acquired the deposit as part of their ANCSA land selections. Drill testing showed that the deposit contained an estimated 55 million tons averaging 6.35 percent 'Cassiar grade' chrysotile fiber. It is not a stretch to say that the Slate Creek asbestos deposit was the most important asbestos discovery in North America in more than 30 years. However, deleterious environmental effects caused by chrysotile asbestos use, once considered a 'wonder mineral' for its effective fire prevention properties in modern buildings, pipe fitting applications, in automotive uses such as brake linings, and in marine vessels, would ultimately prevent the development of the resource. Other mineral projects undertaken on Doyon Lands included drill-testing of promising, high grade base metal deposits in the 40 Mile Region, which contain significant high-grade resources of lead and silver.

Bigelow's WGM Inc. mineral assessments in northwest Alaska played an important role in assessing mineral endowment of the NANA region. WGM Inc. received a contract from the U.S. Bureau of Mines to investigate the mineral potential of portions of northwest Alaska, which would substantiate the significance of mineralization at Red Dog Creek first recognized in 1968-1970 by AMHF inductees Irv Tailleir of the U.S. Geological Survey and prospector/pilot Bob Baker. As a result of the confirmation of volume and richness of the zinc-lead-barite mineralization exposed at Red Dog Creek, NANA Regional Corporation selected the Red Dog area as a portion of the ANCSA entitlement. Beginning in 1989, the NANA-owned Red Dog mine, which is currently operated by Teck Alaska Inc., has been one of the world's largest producers of mined zinc, a critical mineral.

WGM Inc. was involved in the discovery of other important lead-zinc-silver resources in northwest Alaska. WGM Inc. geologists Rick Fredericksen, Gaylord Cleveland, and Jerald Harmon would explore the critical 1978 Lik SEDEX mineral deposit drilling program, with indicated a large resource containing 12% combined lead and zinc and a healthy byproduct of silver. The Lik deposit occurs on Alaska State lands and could be developed in the future to sustain metal output in the now variously recognized *Red Dog-Noatak Mineral Province*.



WGM Inc drilling the Lik deposit in the 1970s, near its namesake, the Wulik River. Credit Gaylord Cleveland

WGM's involvement in successful mineral projects were not confined to base metals. During the 1980s and 1990s, WGM Inc. geologist Jason Bressler and colleagues drill-tested the Denali placer gold mine along the Denali Highway north of Anchorage. This became one of Alaska's largest historic placer gold producers, eventually yielding more than 500,000 ounces of placer gold from 1981-1995.

Beginning in the early 1980s, WGM Inc., carried out a multiyear exploration program with Sumitomo Metal and Mining of Japan. The project, known as the Stoneboy Joint Venture, was originally designed to investigate base metal

anomalies thought to indicate the presence of SEDEX and/or VMS deposits hosted in the Yukon-Tanana Terrane. But in 1994, during the drill-testing of gold-in-soil anomalies and follow-up geophysical investigations carried out by a previous exploration firm in a poorly explored portion of the Goodpaster mining district, WGM Inc. geologist Jason Bressler and his colleagues discovered the Pogo gold deposit. When placed into production in 2006, Pogo became Alaska's second largest gold producer. By 2017, Pogo produced 3.6 million ounces gold from high grade ores.

Riz continued professional involvement in Alaskan ore deposit evaluations into the 21st Century. Riz was President and Chief Executive officer of Ventures Resources Corporation (Ventures), a junior company established in the late 1990s to evaluate the lode gold potential in the historic Iditarod mining district in southwest Alaska. Much of the lands being explored and drill-tested by Ventures were owned by Doyon Limited. He retired from Ventures in 2005.

Riz joined the board of Goldrich Mining Company (formerly Little Squaw Gold Mining Company) in 2003, which has significant mining claims in the famed Chandalar placer and lode mining district in the east-central Brooks Range (discovered in 1905 by AMHF inductees Frank and Nevelo Yasuda). While associated with Goldrich, Riz himself conducted petrologic examinations of ore zones and host rock and judged that the Mikado gold-quartz mine and related gold deposit were probably formed in orogenic conditions, and exploration should be carried out with that model in mind. He remained on the Board of Goldrich until 2017—finally retiring at the age of 86.

Retirement and Legacy

Riz Bigelow would finally enter a much-deserved retirement into the early 21st Century after sixty+ years of work in the mineral exploration field. His work as both field geologist and as an effective exploration program designer.

In the writer's opinion, there is no other geologist in Alaska's mineral exploration industry that can be compared to Riz Bigelow.

Besides his successful mineral exploration career, Bigelow was involved in several civic, professional and public functions. He served on the State of Alaska's Geological Map Advisory Board and was a past President of the Alaska Chapter of the American Institute of Professional Geologists (AIPG). The late Ross G. Schaff, a former State Geologist, would say that Bigelow's support for the State's geological mapping programs during the 1970s and 1980s was crucial, when the state's mapping budget was being challenged.

Riz was a man of many passions and interests. Some were history, a broad range of music from classical to folk, jazz and many others, theatre, sports, and gardening. His flower gardens were on the Anchorage "Tour of Gardens". His children and grandchildren will always remember him for singing songs, reading to them, and for his colorful stories. He was a wonderful storyteller who infused his experiences with wit and charm. Riz enjoyed nothing more than a stimulating conversation and was known for his biting wit and humor. Riz was also a romanticist, scientist, adventurer, explorer, and a man highly respected by his peers.

At the time of his passing, Riz was preceded in death by his parents and brothers Vernon Bigelow Jr. and Timothy Bigelow. He was survived by his sister Melissa Walworth of Boise, Idaho, his first wife Joyce (Woods) Bigelow-Jarvis of Ferndale, Washington and their three children Charles Bigelow Jr. of Ashland, Oregon, Weston Bigelow of Eugene, Oregon, and Cynthia Bigelow of Okanogan, Washington, and his loving spouse Donna (Morris) Bigelow of Lewiston, Idaho and their two children Adam Bigelow of Wasilla, Alaska and Elizabeth Bigelow of Lewiston, Idaho. He is also survived by seven grandchildren and five great-grandchildren as well numerous, nieces and nephews.

Written by Tom Bundtzen; Reviewed by Mitchell Henning and Harold J. Noyes.

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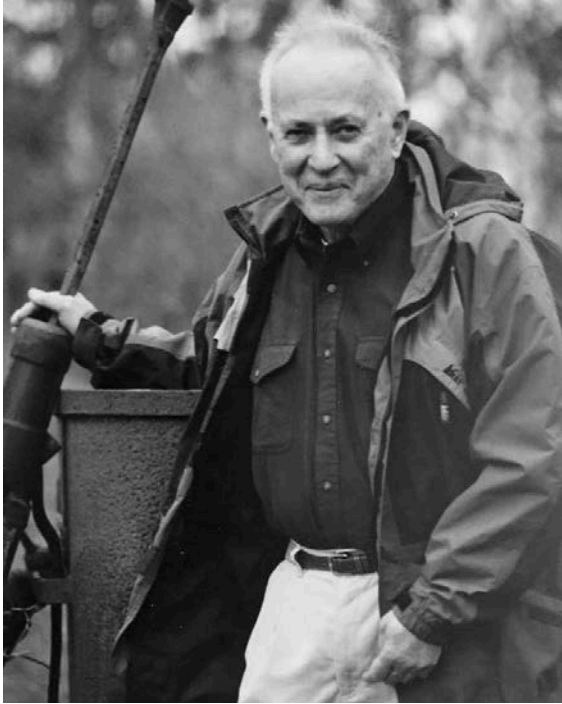
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Chuck Hawley undated. Credit Family collection

Charles Caldwell Hawley

October 23, 1929 to January 14, 2016

Noted economic geologist, mining industry leader, musician and mine historian Charles C. (Chuck) Hawley died of complications due to Parkinsons Disease on January 14th, 2016 in Anchorage, Alaska. Chuck was born in Evansville, Indiana to William McKinley Hawley, a Presbyterian Minister, and Evelyn Barnes nee Caldwell. Chuck Hawley was one of most respected and beloved individuals among Alaska's Mining Fraternity.

Early Life and Education

At an early age, Chuck discovered his calling as a geologist. He enjoyed football in high school and college and played the trumpet in community bands throughout his life. He met his true love, artist Jenny Lind, at Hanover College in Indiana, and they were married in 1951. They were married for 64 years at the time of his passing.

After obtaining a BS Degree in Geology and Chemistry in 1951 at Hanover College, Chuck joined the U.S. Geological Survey (USGS) and moved to Denver, Colorado, where he worked on uranium exploration and support for the Nevada Test Site and other projects. In 1963, Hawley completed a PhD degree in Economic Geology at the University of Colorado-Boulder while studying mineral deposits in the Colorado Mineral Belt. During this time, Chuck became an acknowledged expert on the strategic metal beryllium, which was and still is used in the nuclear weapons applications as well as other applications in the nuclear power industry. Hawley became acquainted and worked closely with C. L. Pete Sainsbury, a well-known Alaska economic geologist who, in 1962, had discovered new beryllium deposits at Lost River west of Nome, Alaska. As Chuck was completing his PhD, he would also corroborate with Alaska Mining Hall of Fame (AMHF) Inductee Donald Grybeck, who initiated a study of mineral deposits near Central City, Colorado, near where Chuck had completed his thesis work. Don was also in pursuit of a PhD in Economic Geology but as a student at Colorado School of Mines in Golden.

Hawley's Alaskan Career

Hawley's initial work in Alaska began in the early 1960s working with AMHF inductee Edward MacKevett during Ed's landmark mineral investigations in then Glacier Bay National Monument. These studies, initiated in the 1960s, later expanded to include the Wrangell and Saint Elias Mountains—now largely within a national park and preserve. Chuck's first Alaskan technical paper was titled: "Geochemical Studies in Glacier Bay, Alaska", which was presented at the 1967 Alaska Minerals Conference held at the University of Alaska in Fairbanks. During his work in southeast Alaska with MacKevett, Hawley investigated a massive barite-sulfide deposit on Glacier Creek that he then judged to be a volcanogenic massive sulfide-barite (VMS) deposit.

The property, which was staked by prospector Merrell Palmer in 1969, would later be known as the 'Palmer Project', which has been explored and developed for the last decade by Constantine Metal Resources Ltd. and Dowa Metals and Mining Company of Japan. Chuck published the first summary of the distribution of stratified massive sulfide deposits in Alaska in a 1976 Alaska Geological Society Annual Conference proceedings, including the Palmer Prospect.



Chuck Hawley at the Glacier Creek aka Palmer barite-sulfide deposit, circa early 1970s, from family files.

In the mid-1960s, Chuck was appointed to the position of 'Geologist in Charge' in Alaska of the well-funded USGS Heavy Metals program, a nationwide research program initiated by the Kennedy and Johnson administrations for metallic mineral resources. Hawley focused on investigating mineral districts throughout south-central Alaska. Eventually his landmark studies of the Chulitna Mining district would be released in a series of USGS open file reports, circulars, and finally a 1974 USGS Professional Paper with Alan Clark as coauthor.

In 1969, Chuck Hawley left the USGS and moved his family to Anchorage, Alaska and started a consulting business, C.C. Hawley and Associates.

This was three years before AMHF Inductee Riz Bigelow established WGM Inc. in Anchorage. Their competitive spirits would sometimes clash but more often blend in their endeavors to find the next great ore deposit. It was during this time that many young geologists were hired and trained by Chuck, including Carl Hale, Rob Retherford, Geoff Garcia, Bruce Hickock, Toni Hinderman, Tony Van der Poel, David Hedderly-Smith, and many others—Chuck's second family.

Over the next 40+ years, Hawley became familiar with nearly every major mineral deposit in Alaska, as well as literally hundreds of gold miners, geologists, geophysicists, drillers, historians, and many important decision makers. Clients of Hawley's consulting companies included both small and large exploration firms, government contracts, and Alaska Native Regional Corporations. A few high lights of his work are mentioned below.

In the mid-1970s, the U.S. Department of Energy (DOE) funded a large-scale reconnaissance for uranium resources in Alaska and elsewhere throughout the United States. The program, entitled the National Uranium Resource Evaluation (NURE), involved the collection of thousands of rock, soil and stream sediment samples in Alaska. Under contract to DOE, C.C. Hawley and Associates completed much of the Alaskan effort. The thousands of samples collected during the 1970s NURE program in Alaska are now being reanalyzed by the U.S. Geological Survey using far better and more comprehensive analytical data packages as a Federal-State effort to evaluate the potential of Alaska's Strategic and Critical Minerals.

The U.S. Bureau of Mines contracted with C.C. Hawley and Associates, WGM Inc., and Salisbury and Dietz to undertake a systematic evaluation of the mineral potential of 'd-2' withdrawn lands adjacent to then Mount McKinley National Park. Hawley's 1978 report would serve as a blueprint for a 1983 re-evaluation of selected portions of these lands, which was completed by contractor Salisbury and Dietz.



Chuck Hawley inspects radioactive mineralization on the Seward Peninsula, as part of NURE program, 1970s Credit C.C. Hawley & Associates.

During a nearly ten-year period, virtually all of the 1970s, while Chuck was very busy running his consulting businesses, he was also heavily connected with lobbying efforts connected to the mineral industry. As related by former AMA Executive Director Steve Borrell, Chuck's efforts to protect the Federal Mining Law (Mining Law of 1872) were well recognized across the U.S. mining industry.

In 1966, Secretary of the Interior Stuart Udall closed all lands to Alaska State Selection pending resolution of Alaska land claims. In 1971, the Alaska Native Claims Settlement Act (ANCSA) was passed by the U.S. Congress. Besides awarding 44 million acres of land to Alaska's natives, section 17 d-2 of ANCSA required withdrawal from mineral entry of 83 million acres of land to be considered for inclusion into National Conservation units. During the continuous 'd-2' land debates, Chuck and others worked hard to prevent highly mineralized areas out of the proposed national conservation units—in terms of the national interest. His contagious enthusiasm for the Alaskan mining industry led to strong support from Senators Ted Stevens, Mike Gravel, and later Frank Murkowski and Congressman Don Young. The Congressional

delegation were always willing to defend the industry during those difficult days. Chuck also obtained the significant support of other resource users including those in the forest products and hunting/guiding industries that were also adversely impacted by the d-2 lands decisions.

At the request of Congressmen Udall and Siberling; through Chuck's leadership, industry groups drafted maps showing areas of mineral potential and released previously classified, drill-tested, mineral resource estimates for many Alaskan prospects—only to have many of the areas and associated mineral deposits intentionally included into proposed conservation units. Many in the mineral industry believed they were deceived by the federal decision makers. This was a personnel blow to Chuck, but he was not blamed for this alleged malfeasance. The 1980 ANILCA Act was passed by the U.S. Congress and signed into law by President Carter and added 104 million acres of land into national conservation units, where mineral development was severely restricted or banned. One example of success for Chuck and others, including the Citizens for the Management of Alaska Lands (CMAL), was the lobbying effort to keep the newly discovered Greens Creek deposit out of wilderness designation in Admiralty Island National Monument. As a result, the 1980 ANILCA Act allowed for the Greens Creek to proceed toward development. Today, Greens Creek is the nation's largest mine producer of silver, and byproducts of zinc, lead, and gold, and a significant economic driving force in Southeast Alaska.

Chuck was the driving force for the establishment of the first AMA Annual Convention, which was held in Anchorage in 1976. This first gathering of the organization has served as a blueprint for all subsequent AMA Conventions. Chuck Hawley was one of the first Executive Directors of the Alaska Miners Association, serving for two years at that position during 1978 and 1979.

Besides being directly associated with mineral

exploration, Chuck, under his firm Coronado Mining Company and later, Hawley Resource Group, became directly involved in attempts to bring into production several, small-to-mid sized lode gold mining projects, including the Independence and Lucky Shot deposits in the Hatcher Pass area, the Big Hurrah deposit east of Nome, the Golden Zone deposit in the Chulitna district, and more recently the Herbert Glacier deposit north of Juneau, where he served as a consultant. It is fair to say that Chuck Hawley spent a good part of his career attempting to put one or more of these deposits (especially the Golden Zone gold-copper-silver deposit near Cantwell) into production and suffered the many trials, heartaches, and failures that many small firms experience. All of these properties continue to exhibit strong interest from the mining community. The Golden Zone and related deposits near Cantwell are currently being explored by Avidian Gold Corporation using, of course, many of Chuck's past data compilations, and drilling and underground efforts.



Chuck's mine crew at the Independence mine in Hatcher Pass circa 1980 photo, from Coronado Mining Company files.

One deposit associated with Hawley's past work deserves mention. During Hawley's work in the Chulitna district, he identified tin-silver mineralization near the future George Parks Highway what would be later called the Coal Creek tin-silver prospect. In the late 1980s, a large mining firm, BHP, drill- tested the Coal Creek tin-silver deposit, but judged that the

tin and silver content was too low. Recently, it was determined from examination of past geological information that the Coal Creek deposit might contain elevated lithium—now a strategic mineral due to its use in modern lithium-based battery circuitry. By reanalyzing Coal Creek core stored at the ADGGS Geologic Materials Center in Anchorage, the high lithium contents at Coal Creek have been confirmed by the Australian junior Discovery Alaska Limited.

Chuck Hawley The Historian

Chuck had a special interest in Alaska's mining history and played an important role in the formation of the Alaska Mining Hall of Fame Foundation (AMHF), an organization formed to honor Alaska's mining pioneers. The AMHF was incorporated as a 501 c-3 nonprofit organization in 1997. Chuck was a founding board member and chaired the honors committee of the organization until 2013.

Chuck published two mining history books:

- 1) *Wesley Earl Dunkle—Alaska's Flying Miner*; and
- 2) *A Kennecott story—Three Mines, Four Men, and One Hundred Years 1897-1997*.

His first book is the biography *Wesley Earl Dunkle—Alaska's Flying Miner* (UAF Press, 2003, 2006) which describes the life of a multi-versatile, talented, and well-educated individual engaged in various mining and aviation endeavors in Alaska during the early 20th Century.

His second and most recent contribution toward the understanding of Alaska's mining heritage is: *A Kennecott Story—Three Mines, Four Men, and One Hundred Years 1897-1997* (University of Utah Press, 2014). In this most recent contribution, Hawley traces the story of three mines so important to the Kennecott Copper Corporation, the world's largest copper producer for the last half of the 20th Century.

Hawley's book focusses on four mining engineers—Stephen Birch, Daniel C. Jackling, William Braden, and Earl Tappan Stannard—self-made men whose technological ingenuities were responsible for much of Kennecott's success not only initially in Alaska but in other national and international venues. In *A Kennecott Story*, Chuck weaves in the political realities present in Alaska during the Early 20th Century, which included the distrust of the Guggenheim Syndicate, which financed the Kennecott mines developments in Alaska and their subsidiaries, including the Alaska Steamship Company, and one of their chief critics: Alaska Delegate to Congress Judge James Wickersham.

Concerning *A Kennecott Story*, Richard Sadler, Professor of History at Weber State University, stated:

"I know of no other book that attempts to do what this book does. This (Hawley's) book is a major contribution to the field of mining, mining history, the history of the American West, the history of copper production, and economic history"

The writer (Tom Bundtzen) was asked by the Alaska Historical Society to review *A Kennecott Story*. In 2015, Charles C. (Chuck) Hawley was awarded the *Historian of the Year* by the Alaska Historical Society (the writer managed to get the award plaque to Chuck just two months before his passing).

Chuck Hawley's Legacy

Chuck Hawley had a huge personnel impact on all of the mining fraternity that worked with him. Many colleagues, friends and family members have displayed a strong sense of loyalty to him, as evidenced by many tributes published in a 2016 Alaska Miners Association Journal devoted to his life and accomplishments.

Chuck Hawley is survived by his brother, John W. Hawley of New Mexico; and three sons David Hawley (who holds a PhD degree in environmental geology) of Portland, Oregon, Ted Hawley of Anchorage, Alaska, and Andy Hawley of Keystone, Colorado; and eight grandchildren and twenty+ great-grandchildren.

Written by Tom Bundtzen; reviewed by Robert Retherford and Ted Hawley

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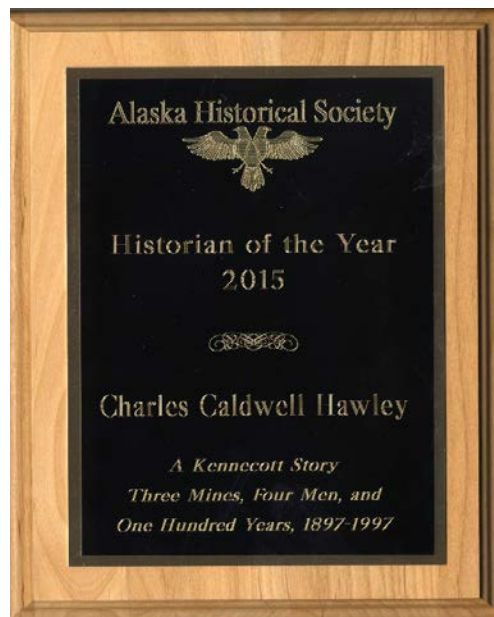
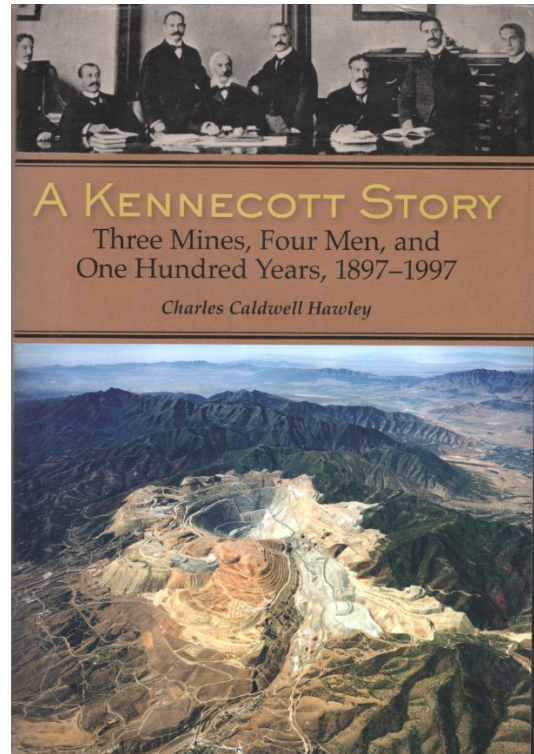
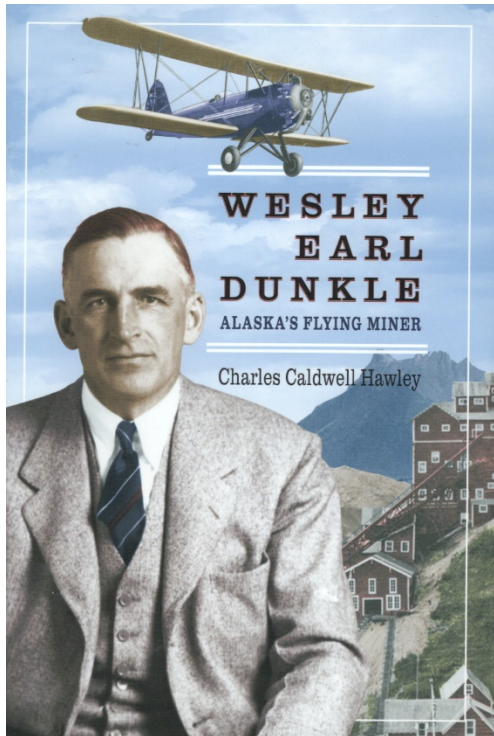
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Distinguished Alaskans Aid Foundation as '98ers

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 thirty-one (31) individuals and organization that have contributed at least \$1,000 to become 98ers, in honor of the first stamperders to Alaska in 1898 at Nome.

The 98ers

Dr. Earl H. Beistline (d)	John Mulligan (d)
Cheryl Bradley	Patrick H. O'Neill (d)
Thomas K. Bundtzen	Larry and Darlene Peterson
David and Patricia Carnes	Elmer E. Rasmuson (d)
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Douglas Colp (d)	Margaret Cox Rich
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Dr. Walter Johnson	Dr. Robert H. Trent (d)
Lyndon Transport	Mitch Usibelli
June and Norm McAtee	Joe Usibelli, Sr.(d)
Wallace McGregor	Candy Waugaman (d)
Neil McKinnon	Dr. William Wood (d)
Tom Mein	Dr. Kenneth L. Zonge
James Moody (d)	

(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.

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

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Treasurer
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