

AEG FOUNDATION



CHARTER

RICHARD W. AND JUNE T. LEMKE SCHOLARSHIP FUND

SUPPORTING STUDENT MEMBER PARTICIPATION IN AEG ANNUAL
MEETINGS AND AEG SPONSORED OR CO-SPONSORED MEETINGS AND
CONFERENCES THROUGH SCHOLARSHIP GRANTS

**AEG FOUNDATION
P. O. BOX 460518
DENVER, CO 80246**

(303) 757-2629

EMAIL: STAFF@AEGFOUNDATION.ORG

WEB: WWW.AEGFOUNDATION.ORG

THE PURPOSE OF AEG FOUNDATION FUND CHARTERS

An AEG Foundation Fund Charter is a document adopted by the Board of Directors. It describes (as applicable)

- the history of a fund,
- donor intent,
- the purposes for which the fund may and may not be used,
- the Board's goals for the fund,
- administrative operating criteria, and
- financial operating criteria.

A Fund Charter demonstrates the Board's commitment to prudent management of the Foundation's resources and compliance with applicable law and regulation. Within the framework of AEG Foundation governance, a Fund Charter is a policy document that may be amended or interpreted by the Board through a simple majority vote. A Fund Charter may refer to other documents that further describe the operations and nature of a fund. Formal Resolutions of the Board that apply to a particular fund will be attached to the Fund Charter as appendices.

The original Charter for the Lemke Fund was originally adopted by the Board of Directors of the AEG Foundation on April 15, 2007. This revision to the Charter was duly adopted by the Board of Directors of the AEG Foundation on April 9, 2011.

By:

William K. Smith, Secretary

FUND CHARTER

LEMKE FUND

INTRODUCTION

The Lemke Fund was created by a bequest received in 2007 from the estate of Richard W. and June T. Lemke. The fund name honors the memory of Richard W. Lemke (1913-2003) and June T. Lemke (1919-2005). This career summary is drawn from the citation for his election to Honorary Member of AEG (Anonymous, 1980) and the Memorial article by Hansen and Colton (2004). Richard (Dick) Lemke enjoyed a long and active career with the U. S. Geological Survey from 1938 to 1976. His early experience was with the USGS mineralogy and petrology laboratory, followed by a supervisory position in the Missouri River Basin Geologic Mapping program. He worked in the Engineering Geology Branch of the U. S. Geological Survey from 1950 until his retirement. His assignments included a vehicular crossing of the Greenland ice cap in World War II, studying earthquake effects and participating in post-earthquake recovery operations in Chile and Alaska, and seminal studies of the geology of underground nuclear testing sites in Nevada. Dick married Ellenor June Thomas in August of 1940, while he was employed by the U.S. Geological Survey in Washington DC. June was his companion on many geological assignments and trips. During World War II, she worked for defense agencies in Washington, and was a secretary to Edward Teller.

Dick was president of the Association of Engineering Geologists in 1970, and was elected an Honorary Member in 1980. He was supportive of students, his fellow geologists, and the profession of engineering geology.

PURPOSE AND SCOPE

The terms of the bequest are straightforward. It is to be used “to establish the Lemke Fund for scholarships for the study of engineering geology.”

Original Charter Scope

In *originally* adopting this Fund Charter by motion at the AEG Foundation Board of Directors meeting on April 15, 2007, the Board considered

- the nature of the Lemke bequest,
- the range of scholarships currently offered by the AEG Foundation, and
- the oft-stated need for scholarships to assist students with the cost of attending Annual Meetings of the Association of Environmental & Engineering Geologists.

The Board reviewed similar programs of other professional geological associations, and selected one as a model for the Lemke Fund scholarships.

Expanded Charter Scope

In September 2007, the Association of Environmental & Engineering Geologists (AEG) provided additional funding to the Lemke Fund with a gift of proceeds from a successful multi-disciplinary and multi-organization international conference held in Vail, Colorado. With the positive experience of student participation in this type of conference, the AEG Executive Council proposed to the AEG Foundation that the Lemke Fund Charter be expanded, upon receipt of AEG's additional funding, to provide scholarship grants to student members of AEG to attend selected national or international meetings or conferences in which AEG participates substantially as a sponsor, co-sponsor, organizer, or manager.

The Board believes that the Lemke Fund fills a need in its portfolio of scholarship funds by using it to support student member participation in AEG Annual Meetings. The Board adopts this statement of scope for the Lemke Fund:

The Lemke Fund supports the scholarly and professional development of student members of the Association of Environmental & Engineering Geologists by awarding grants intended to offset part of the cost of attending and participating in scientific and technical conferences and association meetings . These grants are named “Lemke Scholarships” and may be awarded to students at the undergraduate or graduate levels. Awards will be made by the AEG Foundation to deserving student members who are sole author or first author of a paper or poster that they personally present at the meeting or conference. The number of awards and value of the awards will be determined annually by the Foundation Board.

FUND MANAGEMENT

General Conditions

Grants from the Lemke Fund are intended to recognize and support deserving undergraduate or graduate students who are student members of the Association of Environmental & Engineering Geologists. Grants are made directly to the student recipients. The Lemke Fund does not support general and administrative (overhead) costs, technical or scientific consulting fees, or equipment purchase or maintenance costs of an educational institution employing or teaching individuals who receive grants from it. In keeping with the Internal Revenue Code classification of the AEG Foundation as a 501(c)(3) charitable organization, the Foundation will not make grants supporting activities or publications that are designed to be used to influence political decisions or processes. The AEG Foundation Board of Directors will make all decisions regarding disbursement of grants from the Lemke Fund in its sole discretion.

In applying for a grant from the AEG Foundation, the grant applicant recognizes that the funds received from the AEG Foundation are intended to offset some costs of attending

and participating in substantially all days of technical sessions at the meeting or conference. Applicants must be Student Members of the Association of Environmental & Engineering Geologists at the time of application, or apply for student membership at time of application. Lemke Scholarship application forms are available on the AEG Foundation web site. Membership application forms are available on the AEG web site.

Lemke Scholarship grants are not payment for services and are intended by the Foundation to be “qualified scholarships” as defined by the Internal Revenue Service. The AEG Foundation shall issue IRS Forms 1099 to scholarship recipients in accordance with IRS regulations. Recipients will be asked to provide the necessary information to complete the Form 1099 upon receipt of their grant. Recipients should consult their tax advisors regarding taxability of the grant.

Application Review and Awards

Application due dates are stated on the application form. A student may receive only one Lemke Scholarship per meeting. Recipients of other AEG Foundation scholarships may also apply for and receive a Lemke Scholarship in the same year.

Applications are reviewed and awards recommended by a Selection Committee. The chair of the Selection Committee will be approved by the AEG Foundation Board of Directors. Awards will be made based primarily on the scientific quality and relevancy to engineering geology of the abstract submitted for the meeting or conference. If the number of acceptable applications exceeds the number of grants available, the Selection Committee may develop prioritization criteria or use a random selection method. The number of awards made each year and the value of the awards are both variable, depending on available funding, the number of applicants, and other factors. The Committee may recommend no award if it chooses.

The award checks will be presented to the student authors after they present their paper or poster.

MANAGEMENT PROTOCOLS FOR THE LEMKE FUND

Introduction

The fund management protocols represent a desire by the Board to achieve long-term stability in the administration of the Foundation’s assets and consistency in the administration of its scholarship funds and programs.

Accounting Standards

Consistent with Board Resolution No. 2006-1 (adopted on May 26, 2006), accounting terminology used in this Fund Charter is intended to conform to Statement of Financial

Accounting Standards No. 117, published by the Financial Accounting Standards Board (1993).

Classification of Fund Assets

With the advice of its independent accountant, the Foundation Board determined to classify all gifts and donations to the Lemke Fund, including founding gifts, as a Temporarily Restricted Net Asset. Earnings of the Lemke Fund will be Unrestricted Net Assets. Effective April 9, 2011, donations to the Lemke Fund will be Unrestricted Net Assets, unless otherwise directed by the donor.

Sub-Funds

For fund administration purposes, the Lemke Fund has two sub-funds, 1) AEG Annual Meeting Support, and 2) Other Meeting and Conference Support. Sub-Fund 1 includes the original Lemke bequest and all donations and earnings of the Lemke Fund through September 30, 2007. Sub-Fund 2 includes \$15,359.82 allocated to the Lemke Fund from AEG's gift to the Foundation dated September 27, 2007.

Lemke Scholarships for AEG Annual Meetings (Sub-Fund 1)

In general, the Board intends to limit distributions from this sub-fund to earnings of the sub-fund and pass-through donations.

Lemke Scholarships for Other Meeting and Conference Support (Sub-Fund 2)

In conformance with donor intent, Sub-Fund 2 may be spent down or exhausted. The Board will establish an annual budget for expenditures from this sub-fund.

Lemke Fund Management Protocols

1. The Board will at least annually review the Lemke Fund balance and its allocation, giving consideration to establishing or changing Board-designated set-asides.
2. With respect to classifying the earnings of invested assets of the Lemke Fund, the Board determines that all earnings are Unrestricted Support.
3. The Foundation may accept donor-designated gifts to the Lemke Fund that have time or purpose limits consistent with this charter. These donations are Temporarily Restricted Net Assets, and earnings from them are Unrestricted Support. The Board's Gift Acceptance Policy will apply.
4. Identifiable costs directly related to the operation of the Lemke Fund may be expensed to the Lemke Fund.
5. Unless otherwise directed by the donor, donations to the Lemke Fund **by AEG members** will be allocated **equally between** Sub-Fund 1 **and** Sub-fund 2.

6. Earnings of the Lemke Fund will be allocated pro-rata to Sub-Fund 1 and Sub-Fund 2.
7. The Board may assess an operational support fee to assist in funding the Foundation's general administrative and fundraising expenses.

GOALS ADOPTED BY THE BOARD OF DIRECTORS

Long-Term Use of the Lemke Fund

The Board believes that the Lemke Fund Purpose and Scope made a part of this Fund Charter are consistent with the Foundation's mission and authority. The Board believes that the Lemke Fund should grow to make more awards, and eventually may be used to make grants to student attendees of AEG Annual Meetings for field trip registration costs. These opportunities exceed the support level available from the present fund balance.

Fund Balance Goals

Additional donations are invited. The Board sets the long-term funding goal for the Lemke Fund at \$100,000 for Sub-fund 1. For fund development purposes, this goal is divided into \$25,000 increments. No long-term goal is set for Sub-fund 2 because it is donor-designated as a "spend down" fund.

SCHEDULE FOR REVIEW OF CHARTER, FUND OPERATIONS, AND GOALS

The board may maintain this charter unchanged or make revisions at any time. This Fund Charter shall be reviewed by the Board of Directors at least once every five years, on a schedule to be determined by the Board. The Programs Committee shall prepare a review report with recommendations for consideration by the Board at that time. The Board may reclassify net assets described in this Charter under the concepts of SFAS 117 to meet the Foundation's mission and operational needs as they change from time to time, provided that, as to the funds from the original bequest, the terms of the bequest are honored.

REFERENCES CITED

Anonymous, 1980, Honorary Member of the Association of Engineering Geologists
Richard W. Lemke. Bulletin of the Association of Engineering Geologists, Vol. XVII,
No. 4, Fall, 1980, p. 223.

Hansen, Wallace R., and Colton, Roger B., 2004, Memorial to Richard W. Lemke, 1913-
2003. AEG News, Vol. 47, No. 2, pp. 13-14.

APPENDIX ONE: FUND HISTORY

Donations and Donor Intent

Sub-Fund 1

The distribution from the Lemke estate for \$25,000 was made, in accordance with the terms of the will, to the Association of Engineering Geologists “to establish the LEMKE FUND for scholarships for study in the field of engineering geology.” The Association (now Association of Environmental & Engineering Geologists) received the funds in January 2007 and transferred \$25,000 to the AEG Foundation, instructing the Foundation to create and administer the Lemke Fund in accordance with the terms of the will.

The entire amount of the bequest was classified as a Temporarily Restricted Asset upon receipt by the Foundation. By the statement of donor intent quoted from the will, there is no requirement placed on the Foundation to hold any of the assets for income and protect them from invasion.

Sub-Fund 2

Sub-Fund 2 was created in October 2007, to accept and administer the gift from AEG of \$15,359.82 as advised by the donor.

Additional donations are invited. Unless otherwise stated by the donor, such donations will be Unrestricted Net Assets.

APPENDIX TWO: BIOGRAPHICAL INFORMATION

HONORARY MEMBER OF THE ASSOCIATION OF ENGINEERING GEOLOGISTS

RICHARD W. LEMKE

Richard W. Lemke, 1970 President of the Association of Engineering Geology, has contributed long and distinguished service to the profession of engineering geology.

Dick was born in Canada but spent his boyhood years in eastern Montana. After graduating from Northern Montana College and George Washington University with a degree in geology, he married Ellenor June Thomas in Washington, D.C. in 1940.

In 1938, he began his highly productive career with the U.S. Geological Survey as a geologic field assistant mapping coal deposits in southeastern Montana. During the early 1940's, Dick was engaged in pegmatite and fluor spar investigations in the southeastern states as part of the World War II Strategic Minerals Program. In 1945 he was assigned to the new Missouri River Basin Development Program, where he supervised eight mapping projects and also conducted his own engineering and glacial geologic studies. Joining the Engineering Geology Branch of the Survey in 1950, he served with total dedication until his retirement in 1976. In addition to his many years of geologic work in the northern Great Plains, his many diverse activities included crossing the Greenland Icecap in 1953 and performing the first geologic studies in this unexplored land; making field investigations in 1957 pertaining to the first nuclear underground shot in the U.S.; and acting as an advisor to the Chilean government in earthquake reconstruction work in 1960-1961. Also, in 1964-1967 he conducted extensive earthquake and other geologic hazard studies in Alaska. During his Survey career, Dick authored or coauthored more than 75 publications and other reports.

Sine his retirement from the Geological Survey, Dick has continued to practice engineering geology as a private consultant and as an enthusiastic contributor to and proponent of the professional stature and well-being of engineering geologists. Dick's hallmark on engineering geology is indelible and identifies contributions of personal excellence and professional integrity.



Memorial to Richard W. Lemke, 1913 – 2003

By Wallace R. Hansen and Roger B. Colton

We are honored here to highlight the life of Richard W. Lemke and to celebrate his 30-year career with the U.S. Geological Survey. Dick was born in Alberta, Canada, but immigrated with his parents to Montana while still an infant. Dick's parents homesteaded about 20 miles northwest of Glasgow, and Dick did the chores around the farm while attending grade school. His parents eventually separated, and Dick consequently was shuttled from place to place with parental families as he grew up.

After high school graduation, Dick studied for two years at Northern Montana College at Havre, where he majored in chemistry while working as a lab assistant and laborer, and as a ranch hand during summers. In the summer of 1935, at age 22, he worked as a day laborer on the construction of Fort Peck Dam. At that time, Fort Peck was the largest earth-fill dam project in the country. Also at that time, one suspects, Dick first learned of geology's critical role in engineering design and heavy construction.

At the end of summer in 1935 Dick enrolled at George Washington University in Washington, D.C., again majoring in chemistry, but during an epiphany, he switched majors and got his degree in geology in 1938. He took graduate courses toward an advanced degree in mineralogy and geology. Once again, he held temporary jobs, including a chemistry lab assistantship, but he also worked for various government agencies, including the National Park Service, the Bureau of Standards, the Federal Housing Administration, the Public Works Administration, the Coast and Geodetic Survey, and the U.S. Geological Survey. Besides greatly widening his experience, these jobs provided insights into governmental business and how it works, especially the U.S. Geological Survey.

On August 31, 1940, Dick married his sweetheart and lifetime companion June T. Lemke, *née* Ellenor June Thomas. In Washington, D.C. during World War II, June was an administrative assistant in war-related scientific governmental agencies, including the National Research Defense Council and the Atomic Energy Commission. She was a secretary to the eminent atomic physicist Edward Teller, father of the hydrogen bomb.

In 1942, Dick joined the U.S. Geological Survey as a career employee. Dick's duties and accomplishments were widespread, both scientific and administrative. Here we can only touch briefly on their breadth and extent.

Dick's first assignment, in 1942-43, was in the Survey's mineralogy and petrology laboratory in Washington. During most of WWII, however, he worked alongside stalwarts Richard H. Jahns (Honorary Member AEG) and Wallace R. Griffiths in the pegmatite belt of the southeastern Piedmont in North Carolina and Virginia, with emphasis on strategic minerals, especially mica. In the mid-1940s he assumed a supervisory role in the Missouri River Basin Geologic Mapping Program, where the primary thrust was on engineering geology, with the approval of Dick's mentor Edwin B. Eckel (Honorary Member AEG), Chief of the Engineering Geology Branch. During that period, Dick's studies emphasized Quaternary and glacial geology, and he authored professional papers on the Great Falls urban area in Montana and the Minot-Souris River area in North Dakota. He also authored many contributions to technical journals and field guides.

In 1953 Dick and Roger B. Colton, both of the Engineering Geology Branch, and several other USGS scientists, spent two months temporary duty with the Military Geology Branch investigating regional geology, periglacial features, and glaciology along the borders of the Greenland Icecap in coastal northwestern Greenland for possible vehicular travel and landing sites for military aircraft. This was the era of the Cold War—no pun—and of the so-called DEW Line, the Defense Early Warning System. Dick and his colleagues Alfred Clebsch and Joseph Hartshorn and other scientists studied geologic and physiographic conditions at remote Ingfield Land reached by traversing a broad expanse of the Greenland Icecap north of Thule Air Force Base.

In 1957 Dick and Wallace R. Hansen were sent to the Nevada Test Site to study and map geologic aspects of proposed underground nuclear testing. The "two-week" assignment turned into three months of long workdays and weekends. At that time, the feasibility of underground testing was loaded with uncertainty and apprehension—whether nuclear explosions could even be contained within rock, or whether groundwater might be dangerously contaminated. There were real fears that underground atomic blasts might trigger destructive earthquakes, or that possible explosion-created radioactive magma might intrude its way to the surface (as if an early day horror movie!). There were a few other concerns also, including the matter of security. Everyone at the Test Site had to have a SECRET security clearance, but Dick's was delayed for unknown reasons. Meanwhile he had to be under full escort at all times. Investigators, it seemed, were troubled by his Canadian birth, his citizenship, and his frequent moving from place to place in earlier years. Dick and Wally's charge was to map in detail the surface geology and stratigraphy of two pilot areas: (1) the USGS Tunnel Area, where conventional high explosives were to be detonated in underground chambers carved out of Tertiary tuffs and (2) the nearby Rainier Mesa Area where a relatively small nuclear device (1.7 kilotons) was subsequently detonated under a much deeper cover of the same rocks. This was a pilot study culminating in the first-ever underground nuclear explosion.

In 1960 Dick and co-worker Ernie Dobrovolsky were sent to Chile to analyze the effects of the devastating Taltal earthquake (M 9.5) in the northern and central parts of that country, particularly in the vicinity of Concepcion, Valdivia, and Puerto Montt. Soon after returning to Colorado and resuming his studies in Montana, Dick again returned to Chile, this time with June and son William, for about a full year of added study and consultations with Chilean authorities regarding further applications of engineering geology to remedial work and reconstruction.

In 1964 Dick, again with Ernie Dobrovolsky, studied the geologic effects of the great March 27, 1964, Prince William Sound earthquake (M 9.2). Dick once noted that he and Ernie were the

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NEWS OF THE PROFESSION—MEMORIALS

Lemke Memorial...continued from page 13

two engineering geologists to play major roles in the investigations of both of the two largest earthquakes ever recorded. Dick studied the effects and made recommendations for reconstruction at Seward, and for his efforts was declared an honorary citizen of Seward by the mayor. Subsequently, the USGS assigned him to study possible effects from potential earthquakes in all the coastal communities of Alaska outside the 1964 damage area, from Ketchikan on the south to Point Barrow on the north. Other geologists participated in parts of that study, but June Lemke participated in them all, as an unpaid field assistant.

In his thirty years with the Survey Dick authored or co-authored more than 75 maps and geologic reports on widely varied topics and widely scattered parts of the globe. After he retired from the USGS in 1973 he was re-employed for three more years as a temporary rehired annuitant to gather up loose ends and complete unfinished products, but he remained with the Survey in spirit and in touch for the rest of his life.

Dick was a founding member of the Denver Section (now the Rocky Mountain Section) of the Association of Engineering Geologists, and served as Section Secretary-Treasurer, Vice-Chairman, and Chairman. In 1970 he served as President of the Association of Engineering Geologists. In 1980 he received AEG's highest honor, that of Honorary Membership. Dick continued to be an active member of the Section and the Association. He was instrumental in the planning of the first three Annual Meetings hosted by the Denver and Rocky Mountain Sections. At the annual banquet in 1989 Dick was surprised with the Floyd T. Johnston Award in recognition of his long and faithful service to the Association. Dick was a Registered Geologist and Certified Engineering Geologist in California, a Registered Professional Engineer in Colorado, and a Certified Professional Geologist of the American Institute of Professional Geologists.

Dick was a longtime friend, a formidable opponent at the billiard table, and a skilled bridge player who also knew the odds in poker and roulette. We are honored to have known him for more than 50 years.

Wallace Hansen and Roger Colton are retired USGS colleagues of Dick and former members of the Branch of Engineering Geology. Wally Hansen was editor of the AEG Bulletin from 1970-1973.

**APPENDIX THREE
DISBURSEMENTS**

2007 Deniz Karadeniz
Marina Drazba
Joshua Theule
Rachel Pirot
Rebecca Brock
Adam Prochaska

2008 Ryan Bartingale
Diana Cook
Serin Duplantis
Kyla Erich
James Fisher
Chesney Gilleland

2009 Ryan Bartingale
Diana Cook
Serin Duplantis
Kyla Erich
Brendan Fisher
Chesney Gilleland

2010 Patrizia Bolz
Holly Brunkal
Tej Gautam
Christine McCabe
Katherine Mickelson

**APPENDIX THREE
BOARD RESOLUTIONS AND MOTIONS**

- 04/15/2007 Original Charter approved by AEG Foundation Board of Directors.
- 05/08/2010 Name changed from “Lemke Fund” to “Richard W. and June T. Lemke Scholarship Fund.”
- 04/09/2011 Selection Committee chair to be approved by the Foundation Board.
Charter review schedule changed to at least every five years.
Donations to fund are to be Unrestricted Net Assets.