

## Division Chair's Message

By Duane A. Eversoll

The GSA Meeting in Boston will provide interesting opportunities for our Engineering Geology Division members. Terry West, Program Chair, and Judy Ehlen, Division Secretary, have put together an EGD Program with extensive activity throughout the meeting. During the 2001 Annual Meeting we will have one Poster Session and four Oral Topical Sessions – one of the four scheduled all day. More than 90 abstracts were submitted for this year's EGD program. This is fewer than last year; however, total abstracts for the entire GSA program for the Boston Meeting were about 700 fewer than last year. There will be two EGD related field trips:

- 1) Sunday, November 4<sup>th</sup> - "Urban Geology of Beacon Hill and Vicinity, Boston, MA: In Memory of James V. O'Connor – A Walking Tour".
- 2) Tuesday, November 6<sup>th</sup> - *Engineering Geology of the Big Dig Project*. Note: The "big dig" is a part of the Boston central artery transportation construction project. The "MetroWest Water Supply Tunnel Project" field trip and the short course "Practical Geoscience Ethics: Elements, Examples and Education" have been cancelled.

The Richard H. Jahn's Lecture will be given by Dr. Robert J. Watters and is scheduled to be at the conclusion of the Wednesday morning topical session. Watters' lectures will cover landslides and slope stability. Bob Watters is an excellent presenter and has upheld the Jahn's Lectureship standards over the last year. Funding and leadership for the Jahn's Lectureship are divided between EGD and the Association of Engineering Geologists (AEG). The Jahn's Lecturer fund is administered by the GSA Foundation. The Jahn's Lecturer for 2002 will be Perry Rahn from the

South Dakota School Mines and Technology, Rapid City, South Dakota (see details on pages 5 and 6 of this newsletter).

I encourage all of our members to attend the EGD's Annual Awards Luncheon on Wednesday, November 7<sup>th</sup>. We will be honoring those who have won the EGD's Burwell Award, the EGD Meritorious Service Award and the Distinguished Practice Award. The Roy J. Shlemon student award winners will also be honored and awarded at the luncheon. Robert Larson, our Past President, is to be congratulated for all of his work in implementing the EGD Shlemon Funds. These funds allow us to recognize Engineering Geology student members that represent the future for EGD. A special "Thank You" to Roy J. Shlemon for not only providing the funding, but for also hosting a students' table last year at the awards meeting.

We hope that GSA will have copies of the latest Reviews in Engineering Geology (REG 14) available for the annual meeting. The title is "The Environmental Legacy of Military Operations". The review was edited by Judy Ehlen and Russell S. Harmon and consists of 14 chapters of military engineering geology information. We are very proud that EGD has its own book series. These books are of excellent quality and provide valuable information for all engineering geologists.

I personally want to thank all of the students who are associated with EGD. I was impressed with the quality of their research studies at last year's meeting and look forward to their participation in Boston. I also want to encourage all students to become more involved with the GSA Sectional Meetings, as well as the Annual Meetings. The Shlemon Scholarships have allowed our Division

to help with some of the student expenses. Since EGD's ongoing strength depends on the work of our new professionals, I believe EGD is making a wise investment for our future.

Thanks to all of my fellow officers for their suggestions, hard work and long hours of dedicated interest during the last year. Jerry DeGraff continues to provide us with all types of EGD data and materials as the editor of our newsletter "The Engineering Geologist." I want to express my thanks to Jerry for all of his hard work and dedication. I also want to thank all of our members for their contributions at the sectional and annual meetings. It is very important that as professional engineering geologists, we keep the public officials and citizens aware of the importance of our profession. Robert Larson has done an excellent job in setting up our website and in keeping it current. If you have any information for the site please contact him. The website is <http://rock.geosociety.org/egd/indx.html>

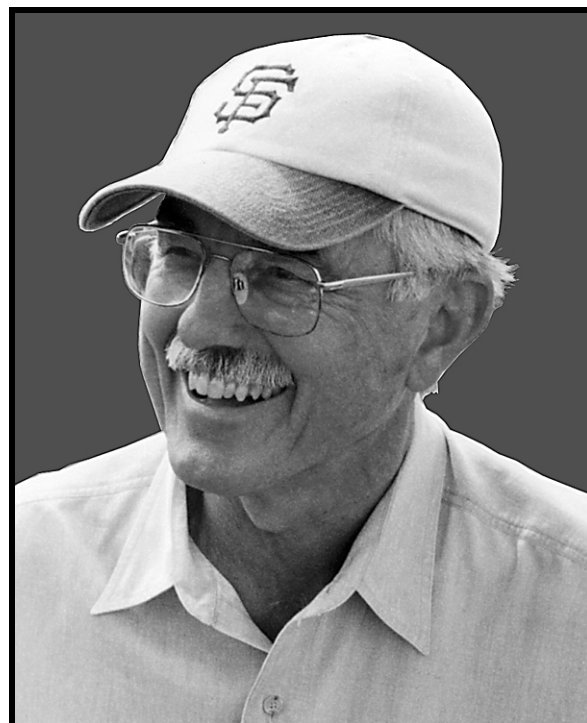
EGD's work is indeed in the hands of all of our members and it is important that we all contribute in some fashion. Please consider helping the Division by attending the EGD Management Board Meeting at the annual GSA Meeting. This meeting has been moved to Sunday, Nov. 4, noon-4 p.m. at the Boston Sheraton, Kent Room. I look forward to seeing many of you in Boston.

### Award Nominations Requested

It is never too early to consider nominating someone to receive recognition from the Engineering Geology Division. There are three awards given by EGD. One is the **Distinguished Practice Award**. The Distinguished Practice Award recognizes outstanding individuals for their continuing contributions to the technical and/or professional stature of engineering geology. A nominee need not be a member of the Engineering Geology Division but must have made a major contribution to engineering geology in North America. Each nomination must be accompanied by a written citation.

Another is the **Meritorious Service Award**. The Meritorious Awards are for outstanding service to the Engineering Geology Division, and only Division members are eligible. A brief written

statement indicating the outstanding service provided by the nominee must accompany each nomination. The deadline for nominations for both the Distinguished Practice and Meritorious Service awards is March 1, 2002. Please submit them to the Chairman of EGD or to the Committee chair noted on the EGD website.



**William R. Cotton is the recipient of the Distinguished Practice Award for 2001.**

The third award is the **E. B. Burwell, Jr., Award**. The Edward Burwell, Jr., Award, established by the Division in 1968, honors the memory of one of the founding members of the Division and the first chief geologist of the U.S. Army Corps of Engineers. This award is made to the author or authors of a published paper of distinction that advances knowledge concerning principles or practice of engineering geology, or of related fields of applied soil or rock mechanics where the role of geology is emphasized. The paper that receives the award must (1) deal with engineering geology or a closely related field, and (2) have been published no more than 5 years prior to its selection. There are no restrictions as to the publisher or publishing agency of the paper. The author or authors of the selected paper need not be a member(s) of the Engineering Geology

Division or of the Geological Society of America and need not be a resident(s) or citizen(s) of the United States. The 2001 recipients of the Burwell award are: David C. Noe, William P. Rogers, and Candace L. Jochim. Nominations for this award should be made by February 1, 2002 and sent to the Chairperson of the Burwell Committee. Again, further information on past recipients of these awards, deadlines, and who to send nominations to are found on the EGD website.



**Charles Welby is the 2001 recipient of the Meritorious Service Award.**

### Last Chance to Hear 2001 Richard H. Jahns Distinguished Lecture

Dr. Robert J. Watters will be presenting his 2001 Richard H. Jahns Distinguished lecture at the Annual Meeting in Boston. It will be given in Convention Center Room 310 on Wednesday, November 7, 11am to noon. If Dr. Watters' itinerary this year did not reach your location, this is a great opportunity to hear his fine presentation.

## Burwell Memorabilia and Research Materials Donated

By Judy Ehlen

In mid-July, Duane Eversoll, Chair of the Geological Society of America's (GSA) Engineering Geology Division (EGD), received an e-mail message from Mrs. Mary Burwell Nesbit of Upperville, VA regarding disposition of her father's collection of books, papers, maps, and 35 mm slides. Edward Boudin Burwell, Jr. was an eminent engineering geologist and the first Chief Geologist of the Army Corps of Engineers. The primary award given by EGD for the best publication in engineering geology is named in his honor. Mr. Burwell was a founding member of the Division as well as its Chair. Mrs. Nesbit is in the process of clearing out three generations of stuff from the family home prior to moving to a retirement home in Sarasota, FL and she asked our help in finding a home for her father's collection.

E-mail messages flew between current members of the Board and past chairs discussing her request, and it was decided that because Mr. Burwell lived in Virginia that a Virginia university or the Corps of Engineers would be appropriate repositories. Mr. Burwell graduated from VPI with Bachelor's and Master's degrees, so VPI was a logical choice, as well as Radford University, which has a very strong engineering geology program. Past Chair Helen Delano and I volunteered to carry out the search and to contact Mrs. Nesbit because we lived closest to her and could most easily view the material if needed. Helen works for the Pennsylvania Geological Survey in Harrisburg. I telephoned Mrs. Nesbit and she described the amount of material as about 12 smallish boxes of books, a 2x2x4 ft. chest of maps, and a box and satchel of 35 mm slides. We were also concerned about when she was planning to move, but as this was to be no earlier than the first of November, we felt we had plenty of time to help her find an appropriate home for the material. We decided not to visit her and review the material, but to let whomever accepted the collection do so.

In our first conversation I asked Mrs. Nesbit to tell me something of her father's career, which she did. He was born in 1894 and served in an Army



artillery unit in World War I. He was gassed in the Meuse-Argonne campaign. After returning from Europe, he completed his degrees at VPI, then worked for various mining companies for 11 years before accepting a job with the Corps of Engineers in the early 1930's. He traveled throughout North and Central America in these positions. As a Corps employee, he also traveled extensively, both in the US and overseas, and worked in a number of divisions and districts - the family lived in Florida, Virginia, and Ohio, among other places. In the early 1940's he was "called to Washington" to become the first Chief Geologist of the Corps of Engineers: His primary responsibility was to insure the safety and security of the nation's harbors and navigable waterways. His responsibilities extended far beyond this, however - the family discovered after the war that he had been involved in the Manhattan Project, and attributed his early death in 1964 of Hodgkin's disease to these experiences. His primary involvement with the Corps related to major dam projects. Mr. Burwell retired from the Corps in 1957 and became an international consultant. These positions took him all over the world. Among other projects, he was involved in the Malpasset dam disaster in France as a forensic engineer, asked for advice on repair of major earthquake damage to the Panama Canal, and served as a consultant to the Thai government on major dam projects.



**Looking over the citation for the first E. B. Burwell Jr. Award in 1969 (from L to R: Mary Burwell Nesbitt, Judy Ehlen, Mike Klosterman)**

I checked VPI's web page with respect to an engineering geology program, but found they had none, so VPI was dropped from the list of

possible homes for the collection. I next contacted Dr. Chester (Skip) Watts at Radford, and he was quite interested in the material, particularly the 35 mm slides. He suggested that cataloguing would make a good student project and thought that the slide collection could be placed on CD and made available to anyone interested. I next contacted Mike Klosterman, current Chief Geologist of the Corps. He was very interested as well, and suggested that I contact the Corps Headquarters Library, located in the Casey Building of the HEC complex. This I did. They suggested that the Corps History Office, located in the Kingman Building in the same complex, would also be interested. Dr. Marty Reuss of this office contacted me almost immediately; he was very excited about the collection.

I again contacted Mrs. Nesbitt and told her what I had found. I gave her the option of which possibility to pursue, and she chose the Corps of Engineers because of her father's long career with the Corps. She invited Mike, Marty, and me to visit her and take a quick look at the material. She also told me that she had unearthed a number of black and white photographs since we had last spoken. We visited her on August 2. The Burwell Collection (pronounced "Burl") is housed in a small outbuilding, possibly the original kitchen, and a short distance from the main house, built in 1800. The property is located right on Rte. 50 in the middle of Upperville. She showed us his books, photographs of her father, various certificates and commendations, his VPI diplomas, maps, various carbon copies of reports, and perhaps best of all, maybe a dozen field notebooks that contain his itineraries as well as field notes, and all his passports. She also had a copy of the original citation given in her father's honor when the Burwell Award was initiated in 1969, including a letter from the citationist to her mother explaining what was being done. She also showed us documents and special engraved invitations he received in association with his participation in an international geological congress in Algiers, including a special passport apparently only used for that trip. Mike was most interested in the black and white photographs, which showed progress in construction of many dams, some of which are currently undergoing rehabilitation. She also showed us his trunk from World War I, which contained a day-by-day diary of his experiences. She also has his belt buckle,

helmet, canteen, and other accoutrements. She's hoping to donate these to the unit museum.

Mrs. Nesbit also told us a number of stories about her father's experiences. For instance, when she was about to be born, the family was living in Florida. Her father insisted that her mother return to Virginia for the birth because no child of his was to be born outside the state. He was a very proud Virginian! Upon arrival in Thailand on one of his visits, he was met by the Prime Minister who had been assigned the task of acting as his personal tour guide of Bangkok for two days. He also met the King and Queen of Thailand - his audience was delayed because the King was involved in a poker game! She also told how during World War II that they never knew where he was - he just left on a trip and returned without being able to say where he had been or what he had been doing. Once he was called to New York with the possibility of a lengthy overseas trip. He took the family with him because they might not see him for some time otherwise, rousing Mrs. Nesbit out of a sick bed. They traveled by train in a compartment where toilet and sink came down from the wall when needed - she spent most of the night using one or the other because of the novelty. This was a somewhat unique experience as the family rarely traveled with him because her mother did not enjoy traveling. Mrs. Nesbit also recounted several stories about his hunting and fishing prowess.



**Among the memorabilia and materials belonging to E.B. Burwell is his Army trunk from service during World War I.**

Mrs. Nesbit has yet to go through the 35 mm slides to remove personal and family photos.

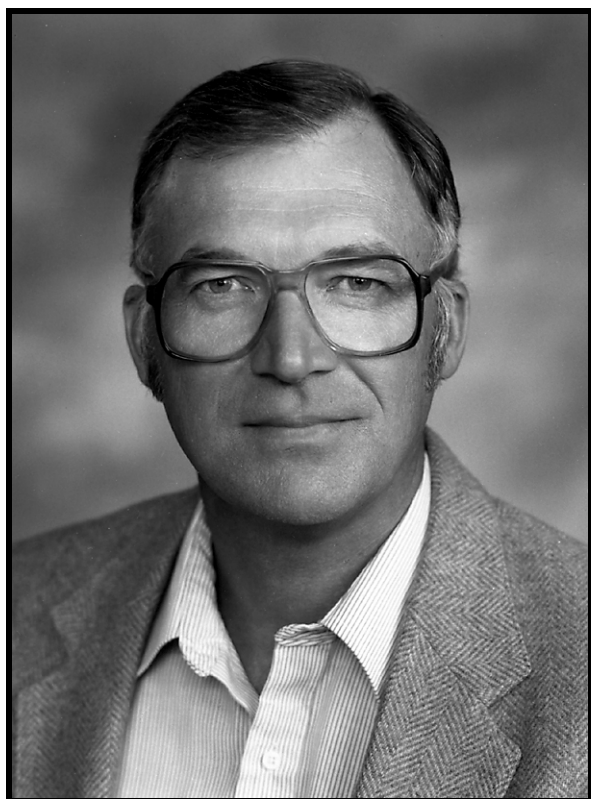
Once this occurs, the collection will be available for pickup. When the History Office has the material, they will go through it and prepare an agreement of acceptance, which will include the right to distribute the various parts as they see fit. For instance, Marty indicated that although they would retain the engineering and mining books, they would not be interested in the GSA memoirs. These could possibly be sent to the library at WES. Mrs. Nesbit has no problem with this, because if she had been unable to find a home for the collection, it would have gone to the local landfill. The collection will be catalogued and once this is done, will be available for use by anyone.

## Opportunities to Hear the 2002 Richard H. Jahns Distinguished Lecturer

The Association of Engineering Geologists in co-sponsorship with the Engineering Geology Division of the Geological Society of America established the Richard H. Jahns Distinguished Lecturer in Engineering Geology Award in 1988. The Jahns funds are now administered by the GSA Foundation. The purpose of the Jahns series is to provide funding annually for a distinguished engineering geologist to present a lecture at a number of academic institutions to increase awareness of students about careers in engineering geology. The Distinguished Lectureship is in honor of Richard H. Jahns (1915-1983), an engineering geologist who had a diverse and distinguished career in academia, consulting, and government. Perry H. Rahn was designated as the 2002 recipient of this award.

Perry H. Rahn was born in 1936 in Allentown, Pennsylvania. In 1959 he received a BS in civil engineering and a BA in geology from Lafayette College, Easton, Pennsylvania. From 1959 to 1961, he was employed as an engineering geologist by the California Department of Water Resources in Oroville, California. In 1965 he received a PhD in geology from The Pennsylvania State University. From 1965 to 1968 he was an assistant professor at the University of Connecticut. In 1968 he began teaching at the South Dakota School of Mines and Technology in Rapid City, South Dakota, becoming a full professor in 1979. In 1997 he

retired and became a professor emeritus. Dr. Rahn is a Professional Engineer and is a member of the various professional organizations including the Geological Society of America, the Association of Engineering Geologists, The American Institute of Professional Geologists, and the National Society of Professional Engineers. His research and publications deal with engineering geology, hydrogeology, and geomorphology. He is the author of "Engineering Geology, an Environmental Approach". For this book he received the Claire P. Holdredge award by the Association of Engineering Geologists in 1987, and the E.B. Burwell award by the Engineering Geology Division of the Geological Association of America in 1990.



**2001 Jahns Lecturer Perry H. Rahn**

Dr. Rahn will be available for two talks during 2002. They have a common theme of showing the importance of geology to engineering works. His first talk is titled "Flood Hazards." This talk covers current techniques of flood evaluation and the Federal Emergency Management Administration programs now in effect. Examples of flooding in the United States are given, and the usefulness

of geomorphology and detailed field mapping to flood hazard evaluation are described. Dams have been the traditional method of reducing floods, and many engineering geologists are employed in the construction of dams. Flood plain management is a more environmentally acceptable method of reducing flood hazards. The second talk is titled "Transmissivity Anisotropy". This talk emphasizes that geologic mapping and an understanding of geology are required to effectively study ground water. Sound geologic input is the limiting factor in most ground water models. Directional permeability is shown to have effects on ground-water pumping and contaminant transport. Surficial and bedrock aquifers in South Dakota and Connecticut are used as examples.

To arrange for a talk at your university or professional group, contact Perry H. Rahn directly. Dr. Rahn can be reached through the Department of Geology & Geological Engineering, South Dakota School of Mines & Technology, Rapid City, SD, 57701, (605) 394-2461, FAX (605) 394-6703, [perry.rahn@sdsmt.edu](mailto:perry.rahn@sdsmt.edu).



**2001 Burwell Awardee David C. Noe**



## Save the Date!

The Engineering Geology Division luncheon and awards ceremony will be held on Wednesday, November 7<sup>th</sup> during the Annual Meeting in Boston. It is scheduled for the Sheraton in room Fairfax A, 12:30-3:45 p.m. While tickets are required for the luncheon, the awards ceremony is open to all.

Also, EGD members are welcome to attend the EGD Management Board meeting. It will be held in the Kent Room at the Sheraton from 12:00 to 4:00 PM on Sunday, November 4<sup>th</sup>.



**2001 Burwell Awardee William P. Rogers**

## Vote! Vote! Vote!

This year EGD members will be asked to vote on changes to the Division's By-Laws as well as the annual slate of officers. Members will be receiving an e-mail telling them the web address for voting electronically.

Members wishing to vote using the traditional paper ballot should contact Bill Haneberg by phone 360-871-9359 or e-mail: [bill@haneberg.com](mailto:bill@haneberg.com).

Biographies for the officer candidates and proposed by-law changes will be posted on the EGD website. Its address is: <http://rock.geosociety.org/egd/index.html>.

## **REMINDER: Student Research Support Available from EGD**

Roy J. Shlemon Scholarship Awards are given to graduate students with the best research proposals within the broad field of engineering geology. Four scholarships will be awarded: two will be \$1000 awards, one for Master's level and one for Doctoral level research, and two will be \$500 second place awards in these categories. Additional awards may be made at the discretion of the Roy J. Shlemon Scholarship Awards Committee.

The primary role of this awards program is to provide partial support of master's and doctoral thesis research in engineering geology. The program is competitive, and there is no guarantee of funding. The Scholarship Awards Committee strongly encourages women, minorities, and persons with disabilities to participate fully in this program. Eligibility is restricted to student members of the Engineering Geology Division.

To join the Division (\$2/year), contact GSA at [member@geosociety.org](mailto:member@geosociety.org) or tollfree at 1-888-443-4472, or go to <http://www.geosociety.org/sectdiv/divisions.htm> and click on "Join a Division."

To apply for these awards, please go to the EGD website at: <http://rock.geosociety.org/egd/index.html> for directions and necessary downloadable forms.

All applications must be postmarked on or before **March 1, 2002**. Decisions by the Roy J. Shlemon Scholarship Awards Committee will be reported to each applicant by letter in April. Results will not be given by telephone. For more information concerning the Awards Program, contact Robert A. Larson at [ralarson@rampageusa.com](mailto:ralarson@rampageusa.com)

**Call for Applications!**

**Apply for the GSA/USGS Congressional Science Fellowship for 2002–2003**

Opportunities to serve as a Congressional Science Fellow are rare, and the experience of serving is unique. This position may be a good fit for you if you would like to work directly with national leaders and use your expertise and experience to help shape science and technology policy on Capitol Hill.

The Congressional Science Fellow will be selected from top competitors early in 2002.

Successful candidates are **GSA members** who possess either a:

- Ph.D. in the Earth Sciences (or a related field), or
- Master's degree in the Earth Sciences (or a related field) with at least five years of professional experience.

If you meet these qualifications, have experience in applying scientific knowledge to societal challenges, and share a passion for helping shape the future of the geoscience profession, GSA invites your application. The Fellowship is open to U.S. citizens or permanent residents of the U.S.

The deadline to apply is February 1, 2002.

For application information, please check our website at <http://www.geosociety.org/science/csf/index.htm> or contact Ms. Karlon Blythe, Program Officer, GSA Headquarters, (303) 447-2020, ext. 1036 or [kblythe@geosociety.org](mailto:kblythe@geosociety.org)