



# The Professional **GEOLOGIST**

## Inaugural Joint Annual Meeting

### A Huge Success!



**AIPG • AEG ANNUAL MEETING  
ST. LOUIS, MISSOURI, 2001**



# AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS NATIONAL SCHOLARSHIP PROGRAM

## Purpose

To assist students with college education costs and to promote student participation in the American Institute of Professional Geologists (AIPG). Four scholarships will be awarded to declared undergraduate geological sciences majors who are at least sophomores. Details for applying for these scholarships are provided below.

## Scholarship Awards

Scholarship awards in the amount of \$1,000.00 each will be made to eligible students attending a college or university in the U.S. Scholarships are intended to be used to support tuition and/or room and board. Awards will be made by September 1, 2002.

## Eligibility Requirements

Any student who is majoring in geology (or earth science), is at least a sophomore, and is attending a four-year accredited college or university in the U.S. can apply. Also, the student must be either a student member of AIPG or must have applied for student membership at the time the application for the scholarship is submitted.

Each student who is awarded a scholarship agrees, by accepting the scholarship, to prepare a 600 to 800 word article for publication in *TPG*. The subject of the article must be related to a timely professional issue.

## Application Process

Applicants must submit a letter of interest with name, address, and telephone number, proof of enrollment in an eligible geological sciences program, transcripts, and an original one-page essay on why she or he wants to become a geologist. The letter and essay should be submitted to the following individual:

**American Institute of Professional Geologists  
Attn: Education Committee Chr.  
8703 Yates Drive, Suite 200  
Westminster, CO 80031-3681**

Questions regarding the application process can be directed to either William Siok or Cathy O'Keefe by telephone (303) 412-6205 or e-mail: <aipg@aipg.org>.

## Application Deadline and Award Date

Applications must be received by February 15, 2002.

## Basis of Awards

Awards will be based on the content and creativity of the essays as judged by the Education Committee. The decisions of the Education Committee are final.

## Miscellaneous

Application requirements for student membership to AIPG are as follows:

1. Student must be currently enrolled in a geological science degree program (as defined by the American Geological Institute).
2. Sponsorship is required via one letter from a geological science faculty member.
3. The application fee is \$5.00.
4. Annual dues are \$15.00.

**AIPG student membership applications can be obtained from the**  
American Institute of Professional Geologists  
8703 Yates, Drive, Suite 200, Westminster, Colorado 80031-3681  
(Application forms are also available on the AIPG website <www.aipg.org>.)

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**FRONT COVER**—Photographs taken at the AIPG•AEG 2001 Annual Meeting in St. Louis, Missouri. Additional photographs from the meeting can be viewed on the AIPG National Web site at <www.aipg.org>.

# PRESIDENT'S MESSAGE

## Joint Annual Meeting with AEG

Robert H. Fakundiny, CPG-04977



**T**his is the last message I will be writing to you while I am still your President. I have been privileged and honored to serve you this year and hope that the work of the Executive Committee has moved AIPG closer to its goals. My messages have been primarily progress reports on the activities of the Executive Committee and the standing and ad hoc committees that are addressing our long-range plan. As before, this message presents our current status and progress.

The Annual Meeting in St. Louis was a resounding success, thanks to the herculean efforts of John Howard of the Missouri Section and his staff, and Larry Rosen of the Missouri Section of the Association of Engineering Geologists (AEG) (our co-convenors) and his staff. The entire membership of both societies is in the debt of these gentlemen for enabling us to accomplish our work in supportive surroundings, learn some new twists in the practice of professional geology, and to "network" with old and new colleagues. We worked hard together and came away much enriched in professionalism and comradeship.

During the Executive Committee meeting, we were advised by our Treasurer, M. B. Kumar, that the treasury is healthy. Our Editor, Ginger McLemore, reported the successes of the publication program and the web site, but admonished that we need more contributions from members. Many of you

wrote me this year lamenting the difficulty of getting your perspectives on certain issues known to the members; *TPG* will accept all reasonable and professional submissions, even if provocative. Membership Chairman, Tom Berg, expressed disappointment in this year's recruiting results. The Executive Committee agreed that I should sign, on behalf of AIPG with the Canadian Council of Professional Geologists, a cooperative agreement whose content is presented elsewhere in *TPG*. AIPG is moving forward with exciting programs and goals that will be furthered by incoming President, Larry Cerrillo, and President-Elect, Rick Powers, and the new Executive Committee.

One of the most gratifying events of the Annual Meeting was the judging of the student posters. Four undergraduate students and four graduate students received awards ranging from \$ 500.00, as first prize for the Graduate Division, to 1-year Associate Memberships for all the contestants. Details the author's names and poster titles are given elsewhere in *TPG*. All of the students were invited to the Annual Banquet, where their awards were mentioned, and afterward they were invited to an informal gathering of prominent members of AIPG and AEG. Even if the Annual Meeting produced nothing more than renewed enthusiasm in these young scientists to become professional geologists, the meeting still would have been a success.

An unexpected benefit of the Annual Meeting was that several participants come to me to offer their special, expertise via AIPG, to the State and Federal agencies dealing with the World Trade Center, the Pentagon, and Pennsylvania crash site; they also offered their expertise based on experience in foreign lands to the U.S. military, who may need geological perspectives of Afghanistan and other nations that are targets for our war on terrorism. If you have knowledge, expertise, or experience in these issues that you would like to offer, please let Headquarters know, and they will build a database that will be accessible to the agencies in need.

Thank you for your support, kind words, and critical suggestions during the past year. I also thank the 2001 Executive Committee, Executive Director Bill Siok, and Headquarters Staff for their hard work and the support they gave me. I look forward to serving as Past-President next year and finishing some of the projects that I started in 2001.

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# CAPE OF GOOD HOPE

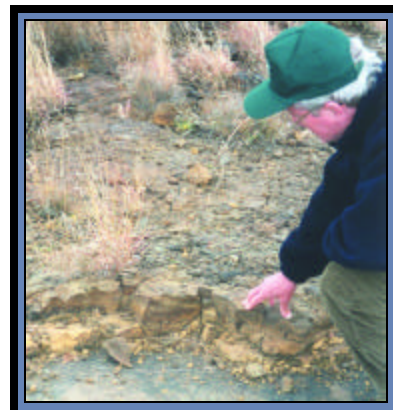
Susan M. Landon, CPG-04591, (AIPG Past President, 1990)



AIPG Past President Susan Landon at the Cape of Good Hope. Photo by Dick Dietz.



Total Eclipse of the Sun on June 21, 2001, from near Lusaka, Zambia. Photo by Susan Landon.



Glacial striations on Precambrian igneous rocks overlain by the Gondwana Dwyka Tillite (Permian) north of Kimberley, South Africa. Photo by Susan Landon.

Many of you know that my husband is an astronomer (we have the heavens and the earth covered!) and he is also part of a near-fanatical group known as eclipse chasers. The primary purpose of our trip was to observe the total eclipse of the sun near Lusaka, Zambia. We had clear skies as the group set up equipment adjacent to a field of paprika at Lamilonga Farm north of Lusaka. It was a spectacular eclipse and Dick's attempt to video the inner corona of the sun was a success. Experiencing a total eclipse is breathtaking and cannot be compared to a partial eclipse of any kind. If you ever have the opportunity to see a total eclipse, I highly recommend it. The local neighborhood will have a chance when totality will cross Casper in 2017—make your hotel reservations soon!

The trip included a couple of days at Victoria Falls and several days surrounded by elephants at Hwange National Park in western Zimbabwe. Although, there have been some problems in this part of the world, the tourist areas of western Zimbabwe and Victoria Falls remain stable and a wonderful place to visit. The local population (whose livelihood depends upon tourism) made sure we had a great time, seeing lots of wildlife and eating wonderful food. Who knew how fond I would be of roast warthog and ostrich is better than beef!

After the initial half of our trip, traveling with the NASA Astronomical Society from Houston, Dick and I rented a car and drove from Johannesburg to CapeTown. One of the highlights included going underground at a DeBeers diamond mine near Kimberley and, as I stepped out of the cage at approximately 2,500 feet down, I realized I had been involved with



Rainbow at Victoria Falls in a view from the Zimbabwean side of the Zambesi River. The Zambesi River is a couple of kilometers wide as it falls into a narrow chasm. Photo by Susan Landon.

wells that weren't as deep as where I stood. It gave me a chilling vision of a new logging method, but I think personal inspection of the wellbore isn't necessary. I will stick with logs and core. We enjoyed driving across the Great Karoo (think Wyoming) and, after crossing the spectacular coast ranges, appreciated the verdant vegetation, flowers, and beaches of the Garden Coast. A visit to the Cape of Good Hope had been much anticipated and, with beautiful weather, we looked out across

the mixing waters of the Indian and Atlantic Oceans. In case you are ever called to be on "Who Wants to be a Millionaire," the Cape of Good Hope is not the southernmost point of Africa. That spot is at Cape Agulhas approximately 150 kilometers to the east and 30 minutes further south.

In preparation for the trip, I tracked down some geologic literature and enjoyed reading the 1952 edition of du Toit's *Geology of South Africa*. To my surprise, the first chapter discussed continental drift and its impact on the geology of South Africa. Dick and I sought out the 300 million year old glacial pavements and Gondwana tillites near Kimberley. As I stood on those beautifully exposed pavements, I remembered the acceptance of continental drift in du Toit's book. I realized that geologic evidence of continental breakup and movement was compelling in the southern hemisphere. The geological community in the northern hemisphere, without significant local geologic evidence, was not convinced of continental motion until mountains of data were provided by geophysical evidence, and then only grudgingly. It reminds me of a statement by an unknown geologist:

*"The best geologist is the one who looks at the most rocks."*

*Outcrop*, Volume 50, No. 9, September 2001.  
Newsletter of the Rocky Mountain Association of Geologists

# Phillips Alaska, Inc. North-Slope Kuparuk Field - Target Zero Spills Program

Jeffrey A. Smith, CPG-10224

With the recent political debate surrounding potentially expanding exploration activities in Alaska, North Slope oil and gas operations have been a popular topic for the local and

national media (Fig. 1). The purpose of this discussion is to introduce the Kuparuk Target Zero Spills Program as well other programs that Phillips Alaska (PAI) utilizes on the North Slope to minimize the environmental foot print of our operations. Until I was transferred from

Bartlesville, Oklahoma to Anchorage, Alaska (Fig. 2) in October 2000, I had no idea of the level of effort and expense that PAI employs to keep hydrocarbons and other fluids off of the ground on the North Slope (Fig. 3).



Figure 1



Figure 2. Anchorage

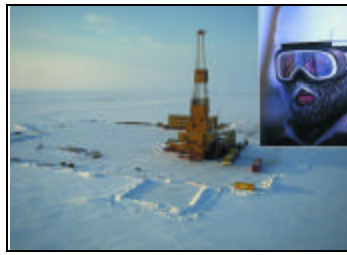


Figure 3. Alaska Operations.



Figure 4. Kuparuk Location Map.



Figure 5. Alyeska Pipeline.

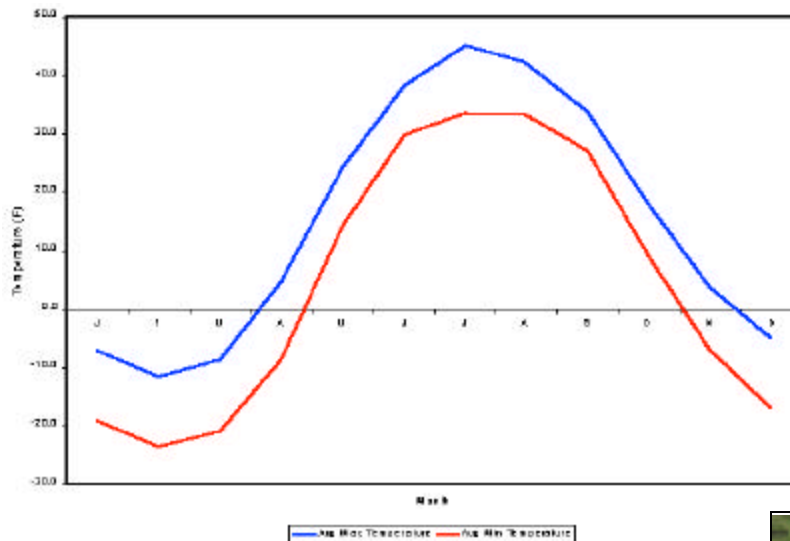


Figure 6. Average Monthly Temperature Variations.



Figure 7. Phillips/BP 737.



Figure 8. Kuparuk Base Camp.

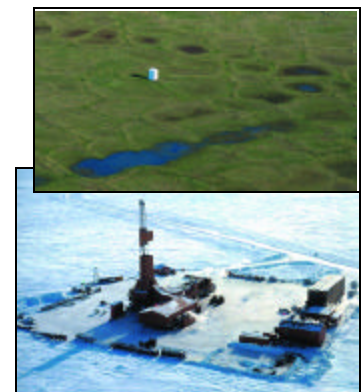


Figure 9. Winter (top) and Summer (bottom) Exploration Site.

## Unique and Remote Location

The Kuparuk Oilfield (Fig. 4) is located on the Alaska North Slope. This is an extremely remote part of the world, approximately 800 miles north of Anchorage, 40 miles west of Prudhoe Bay, inside the Arctic Circle, and is bordered to the north by the Beaufort Sea. The 800-mile long Alyeska Pipeline (Fig. 5) transports approximately 1 million barrels of oil per day to Valdez, Alaska where polar tankers take the crude to refineries in the lower 48. The average low temperature in February is  $-25$  degrees F, and the average temperature in July is 45 degrees F (Fig. 6). The average low temperature varies from the average high temperature on any given day by less than 10 degrees F. The mean annual temperature on the North Slope is 9 degrees F. When the sun comes up over the horizon on the morning of May 15th, it does not go down until July 27th. When the sun goes down below the horizon in the afternoon of November 26th, it does not come back up until January 18th. The average annual rainfall is 6-inches while the average snowfall is 12-inches, which means that the North Slope may be described as a desert.

PAI and BP North Slope workers are flown from Anchorage to the Slope on a 737 jet (Fig. 7) which makes as many as 5 round trips a day. The Kuparuk Base Camp houses a maximum of 1,200 people with an average on any given night of over 900 (Fig. 8). The Camp has a movie theatre, weight room, cardiovascular room, steam room, and an abundance of good food. Most Slope employees work 12 hours a day on a rotational basis (7 days on and 7 days off, 14 on and 14 off, ect.).

## Tundra Protection

Our goal at PAI is to develop and operate oil and gas fields on the North Slope without having an adverse environmental impact. A large part of this effort is tundra protection. All of our exploration work is done in the winter in order to use utilize ice roads and ice pads for these activities (Fig. 9). PAI spends over \$5 million each year on building ice roads and ice pads that melt each summer. The use of ice roads (Fig. 10) and ice pads allows PAI to drill a well in remote areas without impacting the tundra. If an exploration area warrants development, gravel roads and drill site pads are constructed (Fig. 11). The gravel is mined from pits that are located on the Slope.



Figure 10. Ice Road.

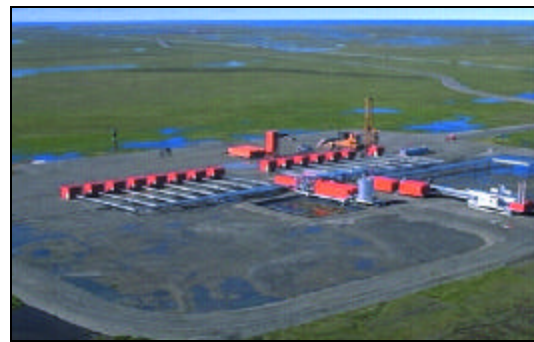


Figure 11. Kuparuk Truckable Drillsite.

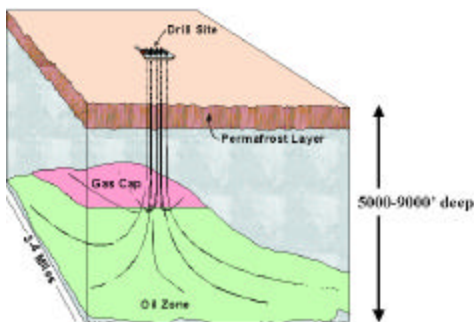


Figure 12. 3-D View of North Slope Development Pad.

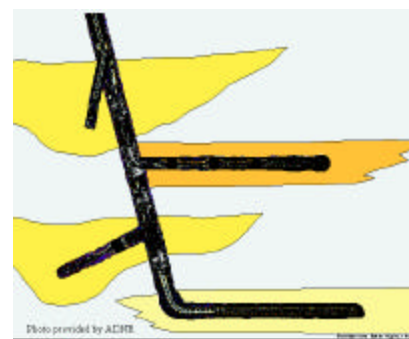


Figure 13. Multi-Lateral Well.



Figure 14. Wellhead Shelter.

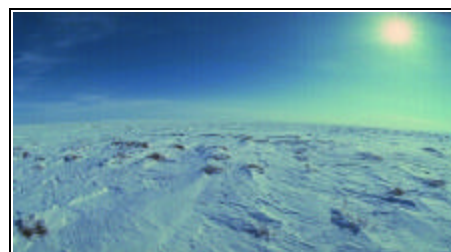


Figure 15. Winter Tundra.



Figure 16. Summer Tundra.



Figure 17. Tucker Special Use Vehicles.



Figure 18. Rolligon.



Figure 19. Rolligon on Tundra.

Using directional drilling techniques (Fig. 12), several dozen wells may be drilled on a single drill pad to minimize the number of drill site pads. In addition, multi-lateral wells are drilled that allow for production of multiple zones from a single well (Fig. 13). Well houses are placed over each well head to protect against the weather and to contain drips and dribbles from the well head (Fig. 14).

Tundra travel is strictly regulated on the Slope. Winter tundra travel (Fig. 15) opens when the snow cover is at least 6 inches and the frost thickness is at least 12 inches and has historically been as early as November and as late as January. Winter tundra travel has closed as early as April and as late as June (Fig. 16). After this date, no tundra travel is allowed at all until July 15th. During summer, tundra travel is limited to a select number of approved vehicles like Tuckers, which have tracks (Fig. 17) and Rolligons which have smooth tires with extremely low air pressure (Fig. 18 and 19). Tuckers and Rolligons do not leave ruts in the tundra.

## Wildlife Protection

The Alaska North Slope is home to caribou, arctic foxes, brown bears, black bears, polar bears, and a large variety of migratory birds (Fig. 20). Consequently, predator management is a priority for PAI with an ultimate goal of minimizing impacts to predator/prey populations and preventing encounters between humans and wildlife. A key element of predator management is proper food waste handling (Figure 21). Workers are not allowed to feed wildlife, and all food waste must be placed into closed-top, bear-proof dumpsters. Absolutely no harassment of animals is tolerated.

PAI also is sensitive to the native subsistence life style and many initiatives are implemented to minimize the impacts to Slope caribou populations. Pipelines placed on vertical support members (VSMs) are raised 5 ft off of the ground to allow caribou to walk beneath them (Fig. 22). In areas with lower VSMs, caribou crossings are built (Fig. 23). Those who will say that we must choose between oil and gas production and wildlife have obviously never been to the Alaska North Slope where caribou populations have actually increased since oil and gas operations began in the early 1970s (Fig. 24). Additionally, according to U.S. Fish and



Figure 20. North Slope Wildlife.



Figure 21. Grizzly Cubs.



Figure 22. Caribou - Raised Pipelines.



Figure 23. Caribou Crossing.



Figure 24. North Slope Caribou.



Figure 25. Polar Bear on Drill Site.



Figure 26. Pipelines in Winter.

## 2000 REPORTABLE SPILLS - CPF2

| Comp.   | Loc. | Date     | Spill #    | Vol (g) | Activity   | Causal Factor(s)<br>(From Tap Root Inv.)   | Preventative Measures   |
|---------|------|----------|------------|---------|--|--|---|
| 1) PAI  | 2A   | 7/23/00  | KR-0020502 | 5       | Operator found spill on pad                        | Unknown  |   |
| 2) PAI  | 2A   | 10/23/00 | KR-0029701 | 2       | Bleed trailer overflowed - changing out wing valve | a) Pre-job mtg held, spills discussed<br>b) No one assigned to monitor bleed valve                 | a) Pre-job mtg needs improvement<br>b) SPAC needs improvement   |
| 3) PAI  | 2B   | 5/22/00  | KR-0014302 | 2       | Gauge failure                                      | Equipment difficulty   | Replaced gauge  |
| 4) PAI  | 2B   | 6/20/00  | KR-0017201 | 3       | Suspected bleed trailer spill                      | Unknown  |   |
| 5) PAI  | 2B   | 9/6/00   | KR-0025001 | 3       | Bleed valve left open after blind swap             | a) Bleed valves were not flagged<br>b) Walk down of 2B-12 not performed                            | a) SPAC needs improvement<br>b) No SPAC   |
| 6) AAI  | 2C   | 3/27/00  | KR-008701  | 40      | Plugged needle valve blew - routine O&M            | Equipment difficulty<br>2C-6 Transmitter failed  | Replaced trans mitter   |
| 7) PAI  | 2M   | 5/6/00   | KR-0012702 | 200     | Crack in valve/S riser flange                      | Inadequate piping support  | Relieve snow loading<br>Inspect other similar locations<br>Employ Subsidence Team recommendations - long term fix |
| 8) PAI  | 2M   | 7/12/00  | KR-0019401 | 424     | Failed multiport valve                             | a) DSO tightened MPGV handle with wrench   | a) Possibly overtightened valve plug  |
| 9) LRED | 2T   | 3/13/00  | KR-007301  | 7       | Valve not completely shut down                     | Third party spill  |   |
| 10) PAI | 2U   | 6/3/00   | KR-0015501 | 2       | Methanol dripping from WAG valve                   | Equipment difficulty<br>Valve grease fitting failed  | Serviced valve  |
| 11) PAI | 2V   | 5/1/00   | KR-0012201 | 201     | Tree-cap o-ring failure                            | Pinched O-ring<br>Swab valve leakage   | Revise O-ring procedure.<br>Service swab valve  |
| 12) PAI | 2X   | 7/3/00   | KR-0018503 | 10      | Prod. flowline leak                                | Corrosion leak   | Installed pipe sleeve   |
| 13) PAI | CPF2 | 11/15/00 | KR-0032001 | 5       | Body bleed valve partially open                    | a) body bleed valve left partially open<br>b) body bleed valve was not flagged or tagged as "open" | a) Did not follow SOP<br>b) Did not follow SOP  |

Table 1. 2000 Reportable Spills - CPF 2.

Wildlife Service, polar bears populations are also thriving on the North Slope (Fig. 25).

### Pipeline Corrosion Program

Without question, the over 500 miles of pipelines at Kuparuk are among the sources with the highest potential for a significant release (Fig. 26). The field is almost 20 years old, and the weather on the Slope is brutal at times. Kuparuk has an extensive internal and external corrosion inspection program, which includes adding chemical corrosion inhibitors to pipeline fluids and using radiography and ultrasonics.

Kuparuk spends over \$8 million per year on corrosion inhibitor chemicals and inspected approximately 1,000 pipelines, well lines, flow lines, and gath-

ering lines in year 2000 (Fig. 27). From 1997 to 2000, Kuparuk has had only 4 pipeline releases due to external corrosion as compared to 61 saves. A save is achieved when an inspection determines that a pipeline has a high potential for a release, and the pipeline is repaired before it fails.

### Target Zero Spills Program

From 1995 to 1999, Kuparuk Operations successfully reduced the number of reportable spills, but the trend went the other direction in 2000 (Fig. 28). In Alaska, the definition of a reportable spill is over 1-gallon spilled onto a gravel road or pad and 1-drop spilled onto tundra or into water. Just to illustrate this point, the 42 spills in year 2000 resulted in a total of less than 80-barrells of hydrocarbons being released,

almost all of it to pad. These small spills to pad are quickly cleaned up and have no adverse environmental impact. PAI realizes that our plans to expand into other parts of Alaska will depend largely on our ability to reduce spills.

In 2001, Kuparuk initiated a proactive anti-spill program known as the Target Zero Spill Program. A team was formed comprised of representatives from each of our major operational groups. The team evaluated each spill that their Group had in year 2000 and tried to identify high risk activities, tap root investigation data, causal factors, root causes and developed spill prevention tools to address these issues. These spill prevention tools were meant to be measurable, quantifiable, and meaningful.

For example at Central Processing Facility 2, four of their 14 spills in 2000

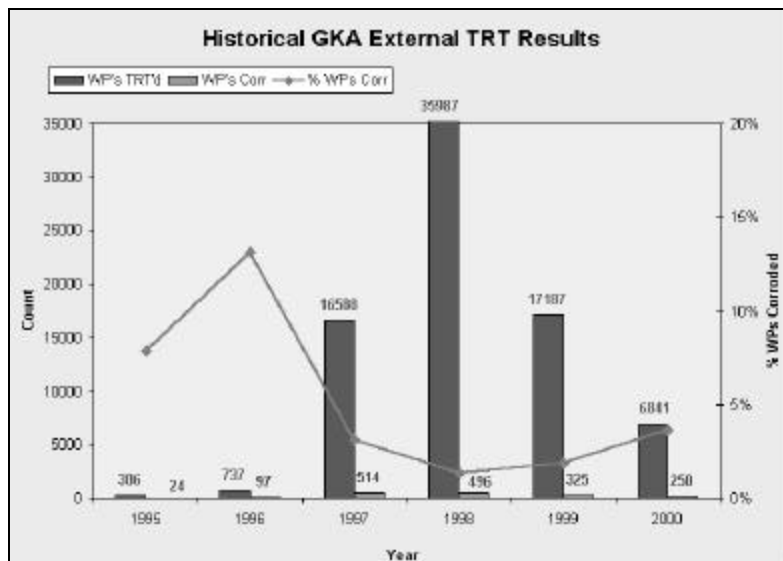


Figure 27. Inspection - External Corrosion.

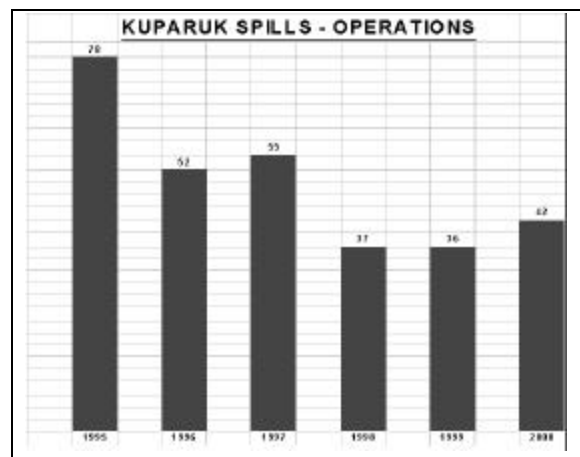


Figure 28. Kuparuk Spills - Operations.

| GROUP           | SPILL PREVENTION TOOLS  |
|-----------------|---|
| (1-3) CPF 1,2,3 | 1) Track down hydraulic hoses with same batch number as failed hoses and replace all hoses that have the identified batch number with new hoses. (DS Leads)   |
|                 | 2) Secure all well house hydraulic oil receptacles. Use tubing hanger for pilot receptacles and bungee manual dump station receptacles to well house walls. (DS Leads) work order written   |
|                 | 3) Alaska Clean Seas will, along with input from Facility Engineer, provide spill volume estimates for all spills that Operations feel are > 1 gallon. (Env. Coord.)  |
|                 | 4) More extensive use of secondary containment:<br>a) oily waste dumpsters; (Facility Lead Operator) work order written<br>b) line heater flanges that pose spill risk should be equipped with catch pans. (DS Leads)   |
|                 | 5) Tree cap seals will be pressure tested when installed, not simply screwed on. (Wells Supv.)  |
|                 | 6) SOP for cycle swab valves will be reviewed to ensure that they are adequate to prevent risk from indirect fired heater causing very sudden change. (DS Leads)  |
|                 | 7) Place higher maintenance priority on high risk spill areas such as:<br>a) line heater vacuum breakers and audit to ensure that rupture disk weather boots are installed; (DS Leads)<br>b) complete installation of restricted orifices of water injection lines by end of year; (DS Leads)   |
|                 | 8) Evaluate spill potential of bleed trailers and modify if found to be inadequate. (Fac. Supv.)  |
|                 | 9) Place laminated card or placard on bleed trailer with:<br>a) did you check tank volume?<br>b) is tank properly grounded?<br>c) is tank in view?<br>e) did you verify hose connections? (DS Leads)  |
|                 | 10) Increase behavioral spill awareness by:<br>a) discuss potential for spills @ morning tailgate meetings (DS Leads)<br>b) discuss spills/near misses at weekly safety meetings (Prod. Supv.)<br>c) Env. Coord. routinely attend safety & tailgate mtgs (Env. Coord.)<br>d) Transfer/share information on spills (causal factors, root cause, ect.) from Group to Group. (Env. Coord./Spill Team Group Leader) |
|                 | 11) Promote positive reinforcement with same vigor as negative reinforcement by developing a rewards program. (Facility Supervisors)  |
|                 | 12) List spill goals monthly/quarterly by operating group rather than annually for the entire field. (Env Coord./Facility Supervisors)  |
|                 | 13) Evaluate well house catalytic heater spill risks and modify if inadequate. Eliminate tubing communication to annulus and other liquid hydrocarbon contamination sources of lift gas system (DS Facility Eng.)   |

Table 2. Spill Prevention Tools.

were related to bleed trailer incidents (Table 1). CPF2 then developed some tools to address bleed trailer activities. The other operational Groups did likewise for their spills. The three central processing facilities (CPF1, CPF2, and CPF3) collectively developed tools to be used for all three Groups since they are involved in almost identical operations (Table 2). You will notice that the tools for the CPFs #8 and #9 address bleed trailers. Another example is that Camps (Table 3) had a couple of rather large gray water spills relating to the use of floats and switches. Camps tool # 2 addresses floats and switches. The list includes both mechanical (engineering) and behavioral (raise awareness) tools.

The next step was for each Group to implement their tools. A schedule was developed with each tool having a completion date. Most of the tools were implemented in the first quarter of 2001 with the remainder being implemented by the end of the second quarter. The Program also is dynamic with new tools being developed when necessary.

Has the Program been successful (Table 4)? Kuparuk Operations is on pace for our best year ever with respect to number of spills. From 1995 to 2000, the five-year average for Kuparuk

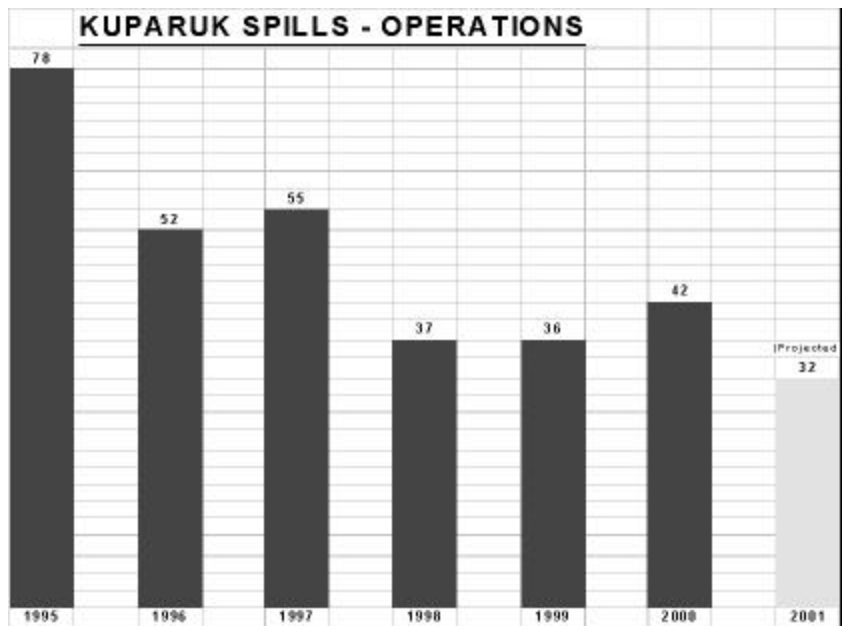


Figure 29.

| GROUP          | SPILL PREVENTION TOOLS  |
|----------------|---|
| 4) Camps       | 1) Discuss spills in Wkly Safety Meeting - encourage employee suggestions. (John Fouse)   |
|                | 2) Modify lift station PMs to specifically address floats & float switches (J. Fouse)   |
|                | 3) Submit FWR to inspect all sumps in KOC, KCC, and KIC (J. Fouse)  |
|                | 4) Develop Piping Inspection SOP for piping in KOC kitchen, KOC laundry rooms, soffit areas under KOC. (J Fouse)  |
| 5) Materials   | 1) Utilize hose Inspection SOP and checklist. (Barth/Harp)  |
|                | 2) Discuss potential for spills at daily toolbox mtgs. (Barth/Harp)   |
|                | 3) Include spill information to Daily Awareness Log that must be signed by each shift. (Barth/Harp)   |
|                | 4) Fluid transfer checklist for line drivers (Barth/Harp)   |
|                | 5) Look for ways to improve training, procedures, inspections, communications, and technology. (B&H)  |
| 6) Field Serv. | 1) Heavy Equipment Truck Drip Pans (Brand/Regist.)  |
|                | 2) 6-month preventive maintenance schedule for heavy and light duty vehicles. (Brand/Regist.)   |
|                | 3) All vehicles that come into shop for unrelated reasons are checked for leaks (Brand/Regist.)   |
|                | 4) Portable spill dikes will be installed under non-mobile equipment for secondary containment (Brand/Reg.)   |
|                | 5) Walk around inspections of heavy equipment each time it leaves job site or shop. (Brand/Regist.)   |
| 7) Cen. Main.  | 1) Spill Buddy System (New Hires) - Focus on environmental, safety, and operational issues. (Nelson/Pittman)  |
|                | 2) Secondary Containment - Look for additional opportunities for secondary containment throughout field in wells/drilling support activities. (Wells Foreman) |
|                | 3) Coworker Awards - Propose a spill incentive effort utilizing existing APC/ECA budget. (Nelson/Pittman)   |
|                | 4) Evaluate the spill potential of sand jet tanks and modify if needed. (Black/Harvill)   |

Table 3. Spill Prevention Tools.

| <b>KUPARUK SPILL REPORT - 2001</b> |             |             |             |             |             |             |                     |                      |                        |                  |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------|----------------------|------------------------|------------------|
| <b>GROUP</b>                       | <b>1995</b> | <b>1996</b> | <b>1997</b> | <b>1998</b> | <b>1999</b> | <b>2000</b> | <b>5-YR<br/>AVG</b> | <b>2001<br/>GOAL</b> | <b>2001<br/>SPILLS</b> | <b>Projected</b> |
| CPF-1                              | 33          | 20          | 15          | 14          | 11          | 7           | 20                  | 10                   | 6                      | 8                |
| CPF-2                              | 17          | 15          | 18          | 5           | 11          | 14          | 16                  | 10                   | 6                      | 8                |
| CPF-3/STP                          | 12          | 8           | 8           | 8           | 5           | 11          | 10                  | 9                    | 3                      | 4                |
| FLD. SERV.                         | 10          | 3           | 13          | 6           | 6           | 3           | 8                   | 5                    | 5                      | 7                |
| CAMPS                              | 4           | 3           | 1           | 1           | 0           | 5           | 3                   | 3                    | 1                      | 1                |
| MATERIALS                          | 1           | 2           | 0           | 2           | 0           | 1           | 1                   | 1                    | 0                      | 0                |
| CENT. MAIN                         | 1           | 1           | 0           | 1           | 3           | 1           | 1                   | 2                    | 3                      | 4                |
| <b>TOTAL</b>                       | <b>78</b>   | <b>52</b>   | <b>55</b>   | <b>37</b>   | <b>36</b>   | <b>42</b>   | <b>59</b>           | <b>40</b>            | <b>24</b>              | <b>32</b>        |

Table 4. Kuparuk Spill Report - 2001.

Operations was 59 spills with 42 spills for year 2000. In 2001, we are on pace with 32 spills (Fig. 29).

This statistic is even more impressive when you consider the fact that the level of drilling activity and production increased in 2001 as compared to other recent years. This reduction is further evidenced by the fact that the spill rate (spill per 200,000 man-hours) has decreased from over four in 2000 to three in 2001. Based on these data, PAI efforts are making a difference with respect to spill prevention.

### Conclusion

So when you read or hear someone saying that increased drilling in Alaska will desecrate the environment, please think of programs like PAI's Target Zero Spills. And remember that North Slope drilling activities have not adversely affected wildlife populations, and PAI has programs specifically designed to leave the tundra unmarred.

Jeff Smith is currently the Senior Field Environmental Coordinator for Phillips Alaska's Kuparuk Field, which is located on the Alaska North Slope. In this position, Mr. Smith is responsible for all regulatory compliance issues such as air, storm water, tundra protection, waste management, and spill prevention/reporting for Kuparuk, which produces over 200,000 barrels of oil per day. After obtaining both his B.S. and M.S. degrees from Stephen F. Austin State University in Nacogdoches, TX, Mr. Smith has worked in the environmental industry for over 11 years. This experience includes three years consulting and the last eight working for Phillips. Previous positions with Phillips include Environmental Representative for North America Exploration and Production in Houston, TX and Environmental Site Manager for Property Risk Management in Bartlesville, OK.

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# Geology May Give bin Laden Away/Experts Study Recent Video with Hope of Identifying His Location in Afghanistan

Keay Davidson, Chronicle Science Writer

**G**eologists are examining rocks visible in a recent videotape of Osama bin Laden, in hopes of shedding light on his whereabouts.

In theory, by identifying the rock types, they might provide new clues to bin Laden's movements. But so far they disagree in their interpretations of the videotape. That's partly because of uncertainty about the rocks' color and distance from the camera.

"You would be surprised at how many people wonder whether or not the geologic information in the picture will be useful. The short answer is 'yes, most definitely,'" said John Shroder Jr., a geologist at the University of Nebraska at Omaha who has worked in Afghanistan.

Unfortunately, he and other geologists complained, the available tape is frustratingly short – just several minutes – and the image is of poor quality.

The U.S. government has apparently approached geologists for their advice about the videotape. Shroder told *The Chronicle* he had received a number of calls about the videotape. He strongly implied, but refused to categorically state, that one caller was associated with the government.

A Pentagon spokesman declined to say whether the videotape is under analysis. "That would go into our areas of intelligence gathering that we aren't able to talk about," because of security restrictions, Defense Department spokesman Maj. Tim Blair replied late Friday.

## EVALUATIONS SOLICITED

The *Chronicle* electronically transmitted color stills from the available videotape to several geologists with experience in Afghanistan and asked them to evaluate the images.

The most specific reply came from Shroder, who has field experience in Afghanistan. In the 1970s, with funding from the U.S. State Department, Shroder developed an atlas of Afghanistan. The Afghan government suspected him of spying and imprisoned him for three months.

He said, "The photo image appears staged, probably with special lighting, in front of rocks that indicate (bin Laden) was probably in a ravine deep inside Paktia, which is a southwestern province in Afghanistan, and Pushtun tribal territory."

## NATURAL CAVES IN AREA

In that region, "the rock has a number of natural caves, as well as hand-dug ones," Shroder said in an e-mail. "This site looks reasonably natural, with the hole behind him either being an animal burrow or possibly a site where some human has dug in a bit looking for gold or some other mineral of interest."

"Local peasant people dig all over the place looking for various minerals that they hope will somehow make them some money."

Afghanistan has one of the world's most diverse geological terrains. It is "a collage, just like Afghanistan is a collage of cultures and tribes," says Larry Snee of the U.S. Geological Survey in Denver and another veteran of Afghanistan field work.

The country's diverse geology is a product of the same collisions between tectonic plates that carved the Himalayan Mountains, he notes.

According to another expert, the videotape shows what resembles horizontal layers of rock maybe limestone deposited over millions of years from an evaporating ocean.

## LIMESTONE A KEY CLUE

If the rock is limestone, that "would suggest that that taped interview was not taken in high mountains in the northeast part of the country, where the rocks are quite different," said John Whitney, also of the U.S. Geological Survey in Denver.

One reason for disagreement is uncertainty over the true color of the background rocks, and over how distant they are. When the videotape color is adjusted to give bin Laden's face a natural-looking color, the rocks appear grayish-white.

Unfortunately, "the quality of the image is so poor," Snee said. "Most of my geological friends would be looking at that image and thinking, 'How can we get more information?'"

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E-mail Keay Davidson at [kdavidson@sfchronicle.com](mailto:kdavidson@sfchronicle.com).

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# Making Headlines About Non-Scientific Articles

Steen Laursen, EFG

**G**eology doesn't make a lot of headlines in the news, which is surprising, because when you look around there is a lot of exciting geology to report. But then again, if reporters aren't contacted by geologists, they'll never learn about geological news. This is the problem with invisible geology. We can't expect the reporters to come to us asking for news, when the world is full of people telling them about all kinds of other things. We have to compete for space in the news.

It is difficult to get geology in the newspapers. I know especially because Denmark is a flat country. Our geology tends to be low down, which means that people tend to think it isn't there at all. They tend to think it has to stand up, like the Alps or the Rocky Mountains, before it is proper geology. But keep fighting out there, because even in Denmark geology can make headlines. You just have to do a bit of planning and some work.

The trick is to make a reporter interested in your story. When he is turned on, he will persuade his newspaper to take an article. A reporter normally has to produce several articles every day, so he is interested in anything he can get.

## News

The first thing you need is a story. It is difficult to find something really new in geology, because most theories have been discussed for years before they are generally accepted. But reporters don't know this and they don't care. To them the acceptance of an idea, the proof of an age or a presentation at a conference is news. In this way geology, like any science, is full of news.

## Bait

A story takes more than just the news, it also takes a bait. Somehow the news has to be made interesting to people. It has to be close to their universe, which usually doesn't include a lot of geology. Or it has to be fascinating or exciting. This is a problem you have to solve before calling a reporter, because this bait is for the reporter as well as for whoever you want to read the final article.

An earthquake is something people can understand, so if one is connected with your news, you have your bait. For example, people understand the color of bricks. So if your country has low quantities of lime-free clays, tell the journalists that without this kind of clay the nation will be out of red bricks in a matter of years, and that this will change the color of the cities and towns. Look at your news, and try to see how it will affect people.

Some news doesn't have any influence on people, but can make good stories never-the-less, such as anything concerning dinosaurs or the geology of Mars. A Danish research project studying dirt from local molehills made several headlines,

because this dirt has very much the same magnetic properties as dust on Mars. In these two cases the bait is fascination.

## Choosing a reporter

Before choosing a newspaper you have to know what you want to achieve with your story. Is it to tell a good story to everybody, to influence some people, to get funds for your project or to make a little money for yourself?. This is crucial for your choice of media. Of course the choice is not yours alone since most newspapers and magazines specialize and your story, the news and the bait, has to fit in.

If you have the time you can look in the newspaper or magazine of your choice, to find a specific reporter who specializes in your kind of article. In one of the Danish papers, they have a news reporter who holds a bachelor degree in geology, so obviously this reporter is prone to take geological bait. But in most cases just call the paper and say what kind of story you have. Don't depend on e-mail, fax or letters alone, but it is a good idea to send out a press release to the newspaper the day before you make the call. The more times the reporter encounters the story, the more likely he is to take the bait. Very much like a fish.

Post the press release to a news agency likely to supply the paper with news too. Some regional newspapers share their sources of information, so if you know this is the case, send your press release to the newspapers your chosen newspaper co-operates with.

## Reporters aren't stupid

Most reporters are very anxious about doing their work properly, but they have to do it quickly. So if a reporter takes up your story about geology and doesn't know anything about this science, and he probably doesn't, he is likely to make mistakes. If he does, don't blame him, blame yourself.

Don't expect him to know anything about your science or your story when you call him. His job is to report. If you want to avoid mistakes in the article he is to write, you have to spend some time informing him properly, so prepare yourself. The best I can recommend is a press release.

## Press releases

The release has to be short, precise and easy to understand, otherwise no reporter has the time to read it. Remember he has to deal with more stories than yours in one day.

The first line has to be interesting, because your press release is competing with other releases on the reporter's desk. Therefore, you start with the bait. For example, "Old Danish domes to be rebuilt in yellow bricks". In Denmark we used to use red bricks, so this is a dramatic change.

Now you present the problem briefly "During the last 1000 years we have built our domes in red bricks in Denmark, but

now the deposits of lime-free clays are running low and soon they will be exhausted. Within a few years we will have to make bricks from clays containing lime, and this produces yellow bricks.”

The third part of the release explains the problem in question. Lime is removed from the clay by rainwater, so only the top part of the Danish clay deposits is free of lime. Because of use/misuse/bad planning, no more of this is available.

## Not first thing first

Start the release with the information most important to you, because if you are lucky, the reporter simply uses your text for the article. This saves him time to concentrate on the other articles he has to write that day. But when the text is fitted into the newspaper, the text may turn out to be too long, and then it may be edited. Usually this is done by cutting the end off. So start with the most important information and try to make the text as long as you think the paper likes it to be.

The language in the release should be close to spoken language. As scientists, we learn to write long and complicated sentences, and we use all kind of special words. This has advantages in science, but makes the text difficult to read. Therefore try not to use geological expressions your mother doesn't understand. Keep the sentences short and put only one or two pieces of information into each sentence.

Remember to keep it short and simple. As in the case of red and yellow Danish bricks, you only have to tell that the content of lime in the clay decides the color of the brick. It is not necessary to tell people that other natural substances can make the same color, because this does not apply to Danish clays. In Denmark it is simply a question of the lime content.

If you have good pictures use them. One or two pictures or graphics explaining the problem completes a good article. A good picture looks good, contains people, and has something to do with the story. In the brick story, it was better to use a picture of a dome, than of a hole in the ground with an exciting kind of clay in it. Good graphics are simple, easy to understand, and have a minimum of text.

The story about the yellow domes in Denmark is an example of how misunderstandings arise. A friend of mine, a geologist, told a reporter that only limited amounts of lime-free clays were found on a specific Danish island, but the reporter got it wrong and believed the geologist meant Denmark as a whole. Next day, the story was on TV and radio and in all the newspapers, though Denmark is in fact rich in lime-free clay. Remember to be precise when you tell your story.

## Worth the troubles

It may well take some days to prepare a story and there is no guarantee it will ever make it to the news, so is it worth the effort? I believe it is. Science is said to be in a crisis because people in general aren't interested in it. As a result, it doesn't get the resources it needs. But people are interested in science, we are just not very good at keeping the press informed. Remember that when you go public with your story, interest in science and your projects in particular increases.

So use the time. It may take two or three days to prepare a story that fulfils your purposes, and it may look like a lot of time, but if you don't use the time needed, you are not likely to succeed in your goals. In this way, at least going public is very much like science.

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## Another, Very Good, Year

William J. Siok, CPG-04773



**I**t's difficult, even at this date more three months after the evil attack upon our country, to put the thoughts and memories of it aside. They intrude unexpectedly throughout the day and night. Many of our civil and religious leaders have eloquently expressed a range of emotion, response, and encouragement to us, and we are getting about our business. Those of us who fall into the post-World War II generation are unfortunately now able to imagine the emotions our parents and grandparents experienced during that war. Now it's our turn to face and defeat an insidious enemy.

On the day of the attack, there was just a fleeting thought to cancel the joint AIPG/AEG Annual Meeting planned for St. Louis. The leaders of our respective organizations, particularly the meeting Co-Chairmen, John Howard and Larry Rosen, had no hesitation about forging ahead.

This issue of *TPG* has a large number of excellent photos from the AIPG Annual Meeting which was held jointly with our colleagues of AEG. If you were in attendance, you'll undoubtedly find the photos both amusing and reflective of genuine collegiality. The meeting was organized by a joint committee composed of AIPG Missouri Section members led by John Howard and by the Missouri Section of AEG led by Larry Rosen. My personal congratulations and heartfelt

thank you to the co-Chairmen, John and Larry, and all the Section members of both organizations for a very successful and pleasant meeting. I know that all members of the Executive Committee hold the same sentiments.

Normally, the AIPG Annual Meeting is the practical culmination of the AIPG Executive Committee's activities for the year. (Although AIPG's financial and business year is coincident with the calendar year.) Thanks to the foresightedness of AIPG Presidents and a demonstrated constructive spirit of cooperation from one president to the next, there has been a continuity in AIPG programs. Because each sitting President has worked closely with his successor, AIPG has not lurched from one annual priority to another, but has in fact been on a continuous program to increase AIPG's visibility and credibility as an advocate for the profession.

The recent AIPG Executive Committees have worked and are working together to focus their efforts not simply on AIPG and its direct affairs, but upon actions that are designed to advocate for the entire profession, including those practitioners who are not members of AIPG. (Since my tenure as Executive Director, the Presidents: 1999 Tom Fails, 2000 Dennis Pennington, 2001 Bob Fakundiny, 2002 Larry Cerrillo, and 2003 Rick Powers.)


It has been a good year, a successful year for AIPG. President Bob Fakundiny has led a successful effort to draft a long-range plan for more clearly enunciating AIPG goals and objectives. The plan's key elements: to implement a Continuing Professional Development program, revise the Ethics Code enforcement process, increase membership and membership services, and increase the professional staff at AIPG headquarters. 2002 President Larry Cerrillo has committed himself to getting these jobs done and 2003 President Rick Powers has already expressed his support and intentions to continue and add to these programs.

It's really an amazing thing to observe the true energy of spirit and dedication shown by AIPG Executive Committee members on both the Section and national levels. It's been written many times, but it remains a truism that the significant accomplishments attributable to AIPG cannot be possible without the dedication of AIPG volunteers. They made 2001 a great year for AIPG, the profession, and themselves. Thank you all! It has been a personal privilege to work with you who are 'retiring' and I know it will be the same with you who are successors.

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# AGI GOVERNMENT AFFAIRS MONTHLY REVIEW

Monthly review prepared by Margaret Baker, David Applegate, MEM-0002, AGI Government Affairs Program, and AGI/AIPG Geoscience Policy Intern Chris Eisenger

## SEPTEMBER 2001

- Changed Priorities on Capitol Hill
- Appropriations End Game
- Education Bill Containing Santorum Amendment Still Pending
- ANWR at Stake in Energy Debate
- House Science Committee Looks at NSF Research Priorities
- MTBE Phaseout Bill Passes Senate Committee
- Coal-Bed Methane Addressed by House Subcommittee
- OMB Releases Guidelines for Federal Information Dissemination
- Lautenbacher Named as Nominee to Head NOAA
- Fall Intern Arrives, Applications Being Accepted for Spring 2002 Internship
- New Material on Web Site

### Changed Priorities on Capitol Hill

In early September, Congress was bogged down in partisan bickering on all fronts. The appropriations process was even further behind than usual, and efforts to produce comprehensive energy legislation had slowed in the Senate as gasoline prices fell. Congressional leaders had abandoned hopes of an early October adjournment, and there was talk of staying in session until Christmas. The biggest political imperative was to avoid dipping into the Social Security surplus. It all seems like a long time ago.

Having met the immediate needs of the crisis — granting war powers, providing \$40 billion in emergency funds, and giving recognition to victims and heroic rescue workers — Congress at month's end was beginning the process of refocusing on prior concerns, but in an entirely new context. As Congress takes up old business, many of the old divisions are gradually replacing the extraordinary unity that followed September 11th. But the rancor is largely gone, holding out hope that reasonable compromises can be found in order to keep things moving ahead. Typical was the call by Sen. John McCain (R-AZ), reported in Greenwire, to set aside old "habits of partisanship and parochialism" and unify behind the president.

Although national defense, economic stimulus, and airport security measures are clearly at center stage, the president has announced that education remains a top priority for his administration and that he wants an education bill on his desk in October. The White House is wrangling with congressional appropriators over final spending numbers for fiscal year (FY) 2002, which began October 1st. The government is currently running under a two-week continuing resolution at FY 2001 levels. Energy policy is making a comeback based on national security concerns rather than consumer demands. More on each of these topics follows.

### Appropriations End Game

After delays related to the tragic events of September 11th and an ever-changing list of priorities, Congress appears

poised to steam forward with the appropriation bills. None of the 13 bills were ready for the president's signature on October 1st, the start of FY 2002. Despite missing the deadline and running on a continuing resolution, Congress is determined to keep all the bills separate, instead of the omnibus package that has become the norm in recent years. The House and Senate have appointed conferees for seven bills that have passed both chambers. They also have agreed on spending levels for the bills and have tentative agreement with the White House Office of Management and Budget (OMB) as well. But the major sticking point right now between Congress and OMB is whether or not OMB will put the final numbers in writing — House Democrats are particularly concerned about being labeled budget-busters in the elections next year. As soon as the final numbers are released, both the House and the Senate are ready to move several of the bills swiftly, including three key geoscience-related bills — Interior, Energy & Water, and Commerce. More information on appropriations is available at <http://www.agiweb.org/gap/legis107/appropsfy2002.html>.

### Education Bill Containing Santorum Amendment Still Pending

After President Bush signaled that overhauling federal educational programs remained a top priority of the administration, a House-Senate conference has returned to work hammering out a final compromise bill. Meetings have taken place behind closed doors with a tight lock on information. Science education groups are largely being forced to watch from the sidelines as deals are made over the size and scope of new federal math and science partnership programs. Efforts are still ongoing to remove a Senate-passed resolution that singles out biological evolution as a controversial theory. In late August, the leaders of 80 scientific and educational organizations sent a joint letter to Congress opposing the Sense of the Senate resolution introduced by Sen. Rick Santorum (R-PA). Since that time, a number of additional organizations have signed on to the letter, including several AGI member societies and the federation of biomedical societies that have powered growth of the National Institutes of Health. The letter and current list of 95 signatories can be viewed at <http://www.agiweb.org/gap/legis107/evolutionletter.html>. In the past month, groups opposed to the teaching of evolution have stepped up efforts to use the Santorum resolution to lobby school boards to teach Intelligent Design theory and other forms of creationism. More at <http://www.agiweb.org/gap/legis.html#evolution>.

### ANWR at Stake in Energy Debate

Sen. James Inhofe (R-OK) is seeking to force energy policy onto the Senate's agenda sooner rather than later. Already passed by the House as H.R. 4, comprehensive energy legislation has been pending in the Senate Energy and Natural Resources Committee. Although committee chairman Jeff Bingaman (D-NM) has said he will start marking up energy legislation as early as this week, Inhofe sought to obtain a guarantee of Senate floor time for H.R. 4 or its counterpart, S. 388, before adjournment this fall. Inhofe introduced two

separate amendments to the must-pass FY 2002 Defense authorization bill (S.1438) that would open the Arctic National Wildlife Refuge for drilling, arguing that energy supplies are important to our military readiness and national security. While other Republicans, most notably Sen. Frank Murkowski (R-AK), agree that national security demands the passage of a national energy policy, they have not supported his tactics. On October 2nd, the Senate voted unanimously to cut off debate on the defense bill, rebuffing Inhofe's efforts. Both Inhofe and Murkowski have vowed to find alternative means to force Senate passage of energy legislation. More at <http://www.agiweb.org/gap/legis107/anwr.html>.

## House Science Committee Looks at NSF Research Priorities

The House Science Subcommittee on Research held a hearing on September 6th regarding the National Science Foundation's (NSF) management and planning for large research projects, including NSF's Major Research Equipment (MRE) account and research facilities. NSF Director Rita Colwell, National Science Board Vice Chair Anita Jones, and NSF Inspector General Christine Boesz testified on how the agency prioritizes and manages these large projects. Jones explained that under the current system the science board reviews and prioritizes proposed major projects. NSF then works to stay within funding parameters provided by the Office of Management and Budget. Committee members questioned the witnesses on what other steps the agency takes to help insure that priority projects are maintained in the budget and what can be done to improve this process. The first earth science MRE project, EarthScope, was included in the FY 2001 NSF request after receiving National Science Board approval. Congress did not fund it, however, and there were no new starts in the FY 2002 budget request. Hopes are high that EarthScope will be included in NSF's FY 2003 request. More information on the hearing is available on the subcommittee's website at <http://www.house.gov/science/research/reshearings.htm>.

## MTBE Phaseout Bill Passes Senate Committee

The Senate Environment and Public Works Committee voted to approve the Federal Reformulated Fuels Act of 2001 (S.950) during a September 25th voting session. The legislation calls for a phase out of methyl tertiary butyl ether (MTBE) as an additive in reformulated gasoline by 2004. MTBE is an oxygenate added to gasoline to make it burn cleaner, but has been found to cause cancer and pollute groundwater. S.950, introduced by Sen. Bob Smith (R-NH), would give power to governors to exempt their state from the current Clean Air Act mandate of two-percent oxygen additive in gasoline. Farm state senators view this proposal as a threat to Midwest ethanol manufacturers, because it also would allow states to opt out of using corn-based ethanol, the only other fuel oxygenate available. Additional opposition comes from several Republican senators, led by Sen. Christopher Bond (R-MO), whose concerns stem from a Department of Energy estimate that the bill might reduce gasoline supplies by more than 400,000 barrels per day, thereby increasing the nation's reliance on foreign oil. These concerns are likely to be addressed as amendments, perhaps in the form of an ethanol

incentive package, when the bill reaches the Senate floor. More at <http://www.agiweb.org/gap/legis107/mtbe.html>.

## Coal-Bed Methane Addressed by House Subcommittee

On September 6th, the House Subcommittee on Energy and Mineral Resources held the first hearing specifically on coal-bed methane in the 107th Congress. Chaired by Rep. Barbara Cubin (R-WY), the subcommittee heard from 13 witnesses from federal and state government and the private sector on the "orderly development" of coal-bed methane from public lands in western states. A major obstacle for many coal-bed methane fields is water. Millions of barrels of water are released from the extraction of coal-bed methane, but there are several questions that are raised — water quality, aquifer depletion, and salinization of soil. Coal-bed methane is becoming an increasingly attractive energy source and is likely to receive more attention in future energy policy deliberations. More on the subcommittee's website at [http://www.house.gov/resources/107cong/energy/2001sep06/agenda2001\\_0906.htm](http://www.house.gov/resources/107cong/energy/2001sep06/agenda2001_0906.htm)

## OMB Releases Guidelines for Federal Information Dissemination

The White House Office of Management and Budget (OMB) has released new government-wide guidelines for "ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies." These guidelines aim to improve federally-produced information disseminated to the public by requiring federal agencies to develop their own quality criteria and to establish an administrative mechanism to respond to inquiries about the quality of information provided. In addition to these steps, agencies must provide a report to OMB on the number and nature of complaints received by each agency and how such complaints were resolved. The OMB guidelines are in response to a congressional mandate inserted into last year's FY 2001 Treasury Appropriations bill by Rep. Jo Ann Emerson (R-MO). One of the most controversial topics in the congressional order was that data should be "capable of being substantially reproduced." OMB released guidelines for this provision in interim form and has extended the comment period for 30 days for input directly related to the "reproducibility" criterion. More information on the OMB guidelines and the previous comment period is available at <http://www.whitehouse.gov/omb/pubpress/2001-39.html>.

## Lautenbacher Named as Nominee to Head NOAA

On September 19th, President Bush announced his intentions to nominate Vice Admiral Conrad C. Lautenbacher, Jr. (ret.) to be the new Administrator for the National Oceanographic and Atmospheric Administration (NOAA). A former Deputy Chief of Naval Operations, Lautenbacher spent the past several months as President of the Consortium for Oceanographic Research and Education (CORE). He has a long history of service with the Navy, including service as staff director for the Chairman of the Joint Chiefs. Lautenbacher has his Ph.D. from Harvard University in applied mathematics. Senate approval is necessary for the position of NOAA Administrator, which also carries the title Undersecretary of

# AGI GOVERNMENT AFFAIRS MONTHLY REVIEW (continued)

Commerce for Oceans and Atmosphere so Lautenbacher will begin the official nomination and confirmation process in the coming weeks. Meanwhile, Deputy Administrator Scott Gudes will continue as acting NOAA director. More from the White House website at <http://www.whitehouse.gov/news/releases/2001/09/20010919-13.html>.

## Fall Intern Arrives, Applications Being Accepted for Spring 2002 Internship

AGI is pleased to welcome Catherine Macris as our 2001 Fall Semester AAPG/AGI Geoscience and Public Policy Intern. A senior geology major at Louisiana State University, Catherine will be spending 14 weeks at AGI getting a firsthand look at the federal legislative process and the operation of executive branch agencies. The American Association of Petroleum Geologists provides support for these internships. We are seeking outstanding geoscience students with a strong interest in federal science policy for the Spring 2002 AAPG/AGI internship. Applications must be postmarked by October 15, 2001. See <http://www.agiweb.org/gapac/intern.html> for further information.

## New Material on Web Site

The following updates and reports were added to the Government Affairs portion of AGI's web site <http://www.agiweb.org> since the last monthly update:

- Strategic Petroleum Reserve (9-28-01)
- Reformulated Gasoline and MTBE (9-26-01)
- Overview of Fiscal Year 2002 Geoscience Appropriations (9-27-01)
- Arctic National Wildlife Refuge (ANWR) (9-25-01)
- Energy & Water Appropriations Bill (9-25-01)
- Interior and Related Agencies Appropriations Bill (9-25-01)
- VA/HUD & Independent Agencies Appropriations Bill (9-25-01)
- Commerce, Judiciary & State Appropriations Bill (9-24-01)
- Superfund and Brownfields (9-25-01)
- Oceans Legislation (9-19-01)
- Climate Change Policy Overview (9-18-01)
- Joint Letter from Scientific and Educational Leaders on Evolution in H.R.1 (Updated 9-25-01)
- Clean Air Act (9-17-01)
- Energy Policy Overview (9-17-01)
- Clean Water Issues (9-12-01)
- Earthquake Policy (9-12-01)
- High-Level Nuclear Waste Disposal (9-14-01)
- Geotimes Political Scene: Monkey Business (9/01)

Sources: American Geophysical Union ASLA 01-25, Boston Globe, E&E News, Greensheets, Greenwire, House Resources Committee, House Science Committee, Library of Congress, USBudget.com, White House, White House Office of Management and Budget.

This monthly review goes out to members of the AGI Government Affairs Program (GAP) Advisory Committee, the leadership of AGI's member societies, and other interested ge-

scientists as part of a continuing effort to improve communications between GAP and the geoscience community that it serves. Prior updates can be found on the AGI web site under "Government Affairs" <<http://www.agiweb.org>>. For additional information on specific policy issues, please visit the web site or contact us at <[govt@agiweb.org](mailto:govt@agiweb.org)> or (703) 379-2480, ext. 212.

## Global Positioning Systems and GIS

*The following letter was sent to Paul Sweeney, Board of Geologists and Geophysicists regarding Global Positioning Systems and GIS and was sent by Jim Jacobs, CPG-07760. Jim is a past AIPG Executive Committee Officer and currently the president of the California Council of Geoscience Organizations. Comments on this letter should be sent to AIPG Headquarters, 8703 Yates Dr. #200, Westminster, CO 80031 or e-mail: <[aipg@aipg.org](mailto:aipg@aipg.org)>.*

Dear Paul:

As the President of the California Council of Geoscience Organizations (CCGO), I am worried that geologists are being pushed out of an area of business that we are qualified to perform. As such, the public will have less benefit of fewer qualified persons to perform such work and geologists will lose an area of practice.

I am concerned that geologists may be disallowed of using Global Positioning Systems (GPS) and corresponding Geographic Information Systems (GIS) due to a strong licensed surveyors lobby that is trying to make the use of GPS the domain of surveyors. The use of this equipment has been available from the military to all Americans and geologists have been using this equipment for years. All the GPS work is for geology-related projects, which is a key point.

Since the RWQCB and other regulatory agencies in the environmental industry may require GPS information on many monitoring well sites for the well locations, I am hopeful that the Board of Geologists and Geophysicists will allow registered professionals to perform GPS/GIS work as part of their work on sites. Please note that we are not claiming to be "licensed surveyors" and we are using GPS for soil sample locations, remediation pit boundaries, site maps, well locations, geologic fault locations, etc. We are not using GPS for property boundaries for sale of properties or other title related issues.

I believe this is an important new area that geologists should be able to practice and not be closed out by the powerful licensed surveyors lobby. Since GPS is only accurate to inches, and is technical equipment, geologists should have the right to use it just as surveyors, or engineers use GPS.

Please let me know your comments and whether the BGG can write a statement to CCGO and the Engineers and Surveyors Board regarding this issue.

*Jim Jacobs, CPG-07760, RG#4815. CHG#88  
CCGO President, 2001*

Compiled by David M. Abbott, Jr., CPG-04570, Ethics Committee Chairman, 2266 Forest Street, Denver, CO 80207-3831, 303-394-0321, fax 303-394-0543, DMAgeol@aol.com



## Letters to the Editor in the October Issue

The October issue of *The Professional Geologist* contained one of the liveliest Letters to the Editor section (pages 22-24 I've read in some time. **Andrew Koenigsberg**, CPG, **Raymond Bisque**, CPG, **James R. Muhm**, CPG, and **Bobby J. Timmons**, CPG, weighed in with divergent views on the global warming issue. **James S. Mellett**, CPG, informed us of his analysis comparing the results of the last presidential election with state policies on the teaching of evolution. And **Michael W. Ruddy**, CPG, informed us about new archeological information on the Viking presence in North America.

Koenigsberg challenges Michael Halbouty's and Gerald Westbrook's objectivity regarding the global warming debate, essentially claiming that Halbouty's and Westbrook's association with the oil business presents a conflict of interest. Koenigsberg presumes that association with the petroleum industry automatically makes their opinions biased. Can't the same bias be alleged for supporters of opposite views of the debate? And, if so, who is unbiased? Given the politicization of this issue, I'm not sure anyone is free of potential conflict of interest charges. My solution is to look at the scientific basis for the conclusions reached by each contributor to the debate. Squarely facing and addressing valid criticism, conflicting data, and unanswered questions is the only way we can scientifically move forward. Bisque takes this tack in citing the "Does using out-of-date methodology constitute malpractice?" from column 66 in the July 2001 issue and follows up with his own good question, "Is using untested models with inadequate data to predict atmospheric changes ethical?" Regardless of your views of global warming, one ought to remember that there are problems with computer modeling; see **Perry Rahn**'s, "Proof, Validity, and Some Legal Advice" in the November 2000 *TPG*. I'm reminded of the debates and side-taking that occurred during the plate tectonics revolution. The difference being the environmental implications of the global warming debate. Muhm's and Timmons's letters reflect a different ethical tack on the global warming issue by addressing the need to inform the public about science.

The contentiousness of global warming makes arriving at a consensus difficult. Nevertheless, we should attempt to do so. The public needs to be informed of good science, including,

perhaps most importantly, its limits. As a profession, we have important information, which ought to be considered in the debate, but we don't have all the answers, nor does anyone else. An equally important question concerns what actions should we take in the meantime? Koenigsberg suggests that not acting is not a responsible decision and he is not alone in his opinion. There are consequences of acting and consequences of not acting.

These letters also demonstrate the diverse views among members that make developing AIPG Position Statements difficult as discussed in **Robert Fakundiny**'s "President's Letter." AIPG position statements should represent the views of all members to the degree possible. This is an example of Canon 4 of the AIPG Code of Ethics, which states, "Members should respect the rights, interests, and contributions of their professional colleagues."

President Fakundiny specifically addressed the proposed policy statement on access to public lands and its first sentence, "AIPG supports access to public lands, both onshore and offshore, for the environmentally responsible development of energy and mineral resources." Society does depend on exploitation of energy and mineral resources. Exploitable deposits are not uniformly distributed. I suggest that the underlying geology responsible for the Colorado Mineral Belt also is responsible for some of Colorado's most spectacular scenery and recreational areas. The Colorado Mineral Belt is an excellent example of the conflict between the desire to preserve the right to exploit minerals where they exist and the desire to preserve large tracts of land for recreational use. Both positions are morally defensible and they conflict because the same land is desired by both groups. Balancing these conflicting views is not easy, nor will everyone be satisfied with the results. Nevertheless, these are important issues that should be addressed, and we as geoscientists have special knowledge that should be acknowledged in the debates. Members of our profession are the ones most familiar with the heterogeneous distribution of mineral resources. Members of our profession also are very familiar with the consequences of exploitation of those resources. We have an obligation to the public to provide our expertise in this area, to inform the public of the consequences of acting or not acting in a certain way. We should acknowledge that different members of our profession rank the consequences differently and thus arrive at different conclusions about proposed actions. But the existence of different rankings of consequences should not prevent us from listing the consequences to the best of our professional ability. That is something I hope we can all agree upon.

These paragraphs have been far more editorial in character than most discussions in this column. I have tried to demonstrate the respect for other's views that I've advocated. I also realize that many of you will have different views. Please contribute them. They will be printed.

# PROFESSIONAL ETHICS & PRACTICES (continued)

## Public Health, Safety, and Welfare versus Individual Freedoms (column 69, Nov '01)

I wrote my piece on this issue on September 13th and 14th (it was due at AIPG on the 15th). The debate between public safety and individual freedom began in earnest by September 16th. By the time you read these observations, 6 to 10 weeks or more later, I suppose the comments are old news. Nevertheless, it is useful to think of these issues from an ethical perspective. It doesn't make grappling with the issues any easier, but it may be a useful view if you haven't taken it before. The preceding topic discussed global warming and natural resource exploitation from a similar ethical perspective. These are issues that immediately affect our profession, while the new ways of doing things following September 11th affect us as citizens. Perhaps this distinction provides for a difference in objectivity, perhaps not. These issues demonstrate that conflict between ethical principles exist. Considered examination of the conflicts between ethical principles will not lead us all to the same conclusions. The answers aren't simple or easy. This is why such issues are worthy of careful examination.

## Misuse of Geologic Maps

In column 57 (Aug. '00) I wrote, "John S. Pallister's article, 'New dimensions in geologic mapping' in the June 2000 *Geotimes* carried the subtitle 'As more maps become digital, they are easier to get, easier to use—and easier to misuse.' Pallister describes digital techniques allowing for the generation of three-dimensional models of subsurface units and uses the example of the Mahomet Aquifer in east-central Illinois. He points out that surficial mapping presents interpretations of incomplete data due to the lack of complete outcrop exposure, and that the scale of the map makes a great deal of difference in how information is presented. The problems are even more acute with subsurface data. Nevertheless, a computer will happily compile a three-dimensional subsurface map that will look nice and precise. It also will produce and print the Geologic Map of the United States (original scale 1:2,500,000) at 1:12,000, or any other scale. That, Pallister points out is the problem; the precision does not reflect accuracy. Although, professional geologists recognize the limitations of our data, related interpretations, and scale, does the public? If the public obtains a digital geologic map or GIS database and starts using it, what sorts of problems will surface? Do we have an ethical obligation to warn potential users of

our maps against such misuse? How should we deal with such misuse? How much of a problem has such misuse been?"

During the annual meeting in St. Louis **Robert H. Fakundiny**, CPG, in his capacity as New York State Geologist, remarked that the New York Geological Survey, which is part of the New York State Education Department, had developed a caveat for its maps with the assistance of other state geologists. It states, "While every effort has been made to insure the integrity of this map and text and the factual data upon which it is based, the New York State Education Department ('NYSED') makes no representation or warranty, expressed or implied, with respect to its accuracy, completeness, or usefulness for any particular purpose or scale. NYSED assumes no liability for damages resulting from the use of any information, apparatus, methods or process disclosed in this map and text, and urges independent site-specific verification of the information contained herein. Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by NYSED." This statement may be a useful template for those of you making maps.

## Sixth Year Acknowledgments

This column completes the sixth year of publication of *Professional Ethics & Practices* (*TPG* is now published 10 rather than 12 times per year). The column succeeds because you contribute to it. I do not claim to have all the answers. Like everyone else, I make mistakes small and large. And so I also wish to thank those who have helped catch some of those mistakes by their review of this column. In particular, my wife, **Sue Abbott**, AS-001, who is the first reader and who therefore catches the most mistakes. **Wendy Davidson**, AS-007, AIPG's Publications Manager, does a great job translating my files into the layout you read. Wendy is a pleasure to work with and does far more for AIPG than most of us appreciate.

Those of you who have contributed your thoughts and experiences on a subject are the most important critics and contributors. Whether others agree with a particular view or not, each contribution is important and looks at a problem from a new direction. As the seventh year of this column begins, please make a New Year's resolution to contribute your thoughts and ideas. Thank you.

### Topical Index to the Professional Ethics and Practices Columns

I have prepared a topical index covering columns 1 through 69 that has been placed on the AIPG web site in the ethics section. The index is in PDF format. The original file is in Microsoft Excel format. If you would prefer the Excel file, send me an e-mail and I'll send it to you. I'll update this index periodically and post the new copy on the AIPG web site. If you have suggestions on organization, please let me know.

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TPG accepts articles of modest length for publication. Submittals should be no more than approximately 1600 words, or six typed pages, double spaced. Longer articles may be divided into parts (e.g., part 1 and part 2), but this is not encouraged. Articles may be technical or professional in nature. General topics include: mining, petroleum, hydrogeology, environmental geology, and geophysical/engineering. Articles containing news of importance to professional geologists also will be considered. Deadline date for submissions is the fifteenth of the month two months before date of issue. For example, the deadline for the November issue is September 15. Articles are reviewed by at least three associate editors before they are approved for printing.

Manuscripts should have the following sections: title, author(s) with CPG number and address, key words, text, tables if included, figures with captions if included, appendix(es) if included, acknowledgments, references cited, and a brief biography.

One original and three copies of each manuscript should be submitted. Whenever possible, text also should be submitted on diskette. Headquarters uses WordPerfect 9 for Windows '98, which is preferred, but Word, ASCII, RTF, or translatable files are acceptable. Articles also can be transmitted by e-mail.

Graphics should be clear, camera-ready, line drawings whenever possible. Photographs (color or black and white) also are encouraged.

TPG wants color slides and photographs. Slides and photographs alone may be submitted for the cover. They should have a geologic theme and an informational caption.

Authors are encouraged to communicate with Headquarters via mail, fax, or e-mail. Send your article and/or photographs or communicate questions to:

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# CALENDAR

## 2001

**December 7-9.** *National Ground Water Association's Ground Water Expo* (also known as the National Convention), Nashville, Tennessee. Information: NGWA Customer Service, 1-800-551-7379.

**Dec. 18-19.** *International Conference on Engineering for Ocean and Offshore Structures*, Singapore; and December 20-21, *International Conference on coastal Engineering Development*, Singapore. Contact: Conference Secretariat, CI-Premier PTE Ltd., 150 Orchard Road #07-14, Orchard Plaza, Singapore 238841, (065) 733-2922, fax (065) 235-3530.

## 2002

**Jan 6-12.** *Winter Conference on Plasma Spectrochemistry*, DoubleTree Paradise Valley Resort, Scottsdale, AZ. Contact: Ramon Barnes, ICP Information Newsletter, Inc., PO Box 666, Hadley, MA 01035-0666, (413) 256-8942, e-mail: <winterconf@chem.umass.edu> or <http://www.chem.umass.edu/WinterConf2002>.

**Feb. 10-13.** *28th Annual Conference on Explosives and Blasting Technique*, Las Vegas, NV. Contact: International Society of Explosives Engineers, 30325 Bainbridge Rd., Cleveland, OH 44139, (440) 349-4400, <www.isee.org>.

**Mar. 10-13.** *AAPG Annual Convention and Exhibition*, Houston, TX. Contact: AAPG, P.O. Box 979, Tulsa, OK 74101, (800) 364-2274 or <www.aapg.org>.

**Mar. 27-30.** *National Earth Science Teachers Association Annual Meeting*, San Diego, CA. Contact: NESTA Meetings, Florida Ave., NW., Washington, DC 20009,

(202) 462-6910 or e-mail: <fireton@kosmos.agu.org>.

**Apr. 29-May 2.** *GPR 2002, Ninth International Conference on Gr Penetrating Radar*, Santa Barbara, CA. Contact: Steven Koppenjan, Dept. ECE, GPR 2002 conference; Hua Lee, University California, Santa Barbara, CA 93106, fax (805) 893-3262.

**May 20-23.** *Third International Conference on Remediation of Chlorinated and Recalcitrant Compounds*, Monterey, California. Information: The Conference Group, 1989 W. Fifth Avenue, Ste. 5, Columbus, OH 43212-1912, USA, 1-800-783-6338 (U.S. and Canada), (614) 424-5461, fax 614-488-5747.

**June 9-14.** *American Society for Surface Mining and Reclamation 19th National Meeting*, Lexington, Kentucky. Information: G.G. Marino, MEA, Inc., 907 Fairview Ave., Urbana, IL 61801, (217) 384-2288, fax 217-384-2291. (Abstracts due: Oct. 15, 2001.)

**Jul. 21-25.** *7th National Conference on Earthquake Engineering*, Park Plaza Hotel, Boston, MA. Contact: Earthquake Engineering Research Institute, 299 14th St. #320, Oakland, CA 94612, (510) 451-0905 or e-mail: <eeri@aari.org>.

**Sep. 22-27.** *SEG International Exposition and 72nd Annual Meeting*, Salt Lake City, UT. Contact: Society of Exploration Geophysicists (918) 497-5500 or <http://seg.org>.

**Sep. 24-27.** *AIPG•AEG Annual Convention and Exhibition*, Reno, NV. Contact: Kel Buchanan (775) 786-4515, <summitcrk@aol.com, <www.aipg.org>.

Send notices of meetings of general interest, in format above, to Editor, *TPG*, 8703 Yates Drive, Suite 200,

Westminster, CO 80031-3681 or e-mail: <aipg@aipg.org>.

## AIPG ANNUAL MEETINGS

Sept. 22-28, 2002  
Reno, Nevada

2003  
Glenwood Springs,  
Colorado

2004  
Northeast Section

2005  
Victoria, B.C.

## AIPG Membership Totals

|                  | As of<br>10/06/00 | As of<br>09/27/01 |
|------------------|-------------------|-------------------|
| CPG - Active     | 4,083             | 3,993             |
| CPG - Retired    | 530               | 522               |
| Member           | 82                | 73                |
| Registered Memb. | 21                | 20                |
| Associate Memb.  | 7                 | 9                 |
| Student Adjunct  | 75                | 102               |
| Honorary         | 19                | 20                |
| <b>TOTALS</b>    | <b>4,817</b>      | <b>4,739</b>      |

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# TYPES OF MEMBERSHIP AND REQUIREMENTS

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**EXPERIENCE:** 8 years beyond bachelor's degree, or 7 years beyond master's degree, or 5 years beyond doctorate

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**APPLICATION FEE:** \$30

**ANNUAL DUES:** \$60 plus Section dues; both pro-rated for remainder of year when accepted

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**EXPERIENCE:** No proof required

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**CERTIFICATION/REGISTRATION:** None required

**SCREENING:** Section and National

**APPLICATION FEE:** \$30

**ANNUAL DUES:** \$60 plus Section dues; both pro-rated for remainder of year when accepted

## STUDENT

**EDUCATION:** Currently enrolled in a geological science degree program\*

**EXPERIENCE:** None required

**SPONSOR:** 1 letter from geological science faculty member

**CERTIFICATION/REGISTRATION:** None required

**SCREENING:** Headquarters can approve

**APPLICATION FEE:** \$5

**ANNUAL DUES:** \$15

## ASSOCIATE

**EDUCATION:** None required

**EXPERIENCE:** None required

**SPONSORS:** 1 CPG, Registered Member, or Member

**CERTIFICATION/REGISTRATION:** None required

**SCREENING:** Headquarters can approve

**APPLICATION FEE:** \$5

**ANNUAL DUES:** \$50 plus Section dues; both pro-rated for remainder of year when accepted

*\*As defined by the American Geological Institute, a geological science is any of the subdisciplinary specialties that are part of the science of geology, e.g., geophysics, geochemistry, paleontology, petrology, etc.*

*Note to those who received their degrees from non-U.S./Canadian universities: If you received a degree from a university or college outside the U.S. or Canada, and the school is unable to provide an acceptable transcript, you must submit a copy of your diploma and a list of courses taken. The Screening Committee may ask you to provide additional information or an equivalency evaluation, at your expense.*

# APPLICATIONS RECEIVED - (09/29/01-11/02/01)

Applicants for certification must meet AIPG's standards as set forth in its Bylaws on education, experience, competence, and personal integrity. If any Member or board has any factual information as to any applicant's qualifications in regard to these standards, whether that information might be positive or negative, please mail that information to Headquarters within thirty (30) days. This information will be circulated only so far as necessary to process and make decisions on the applications. Negative information regarding an applicant's qualifications must be specific and supportable; persons who provide information that leads to an application's rejection may be called as a witness in any resulting appeal action.

## Applicants for Certified Professional Geologist

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Sponsors: Steven Kolthoff, Doug Peters, Douglas Santo.

### **OH-Peter Mackenzie**

554 White Oak Pl., Worthington OH 43085.  
Sponsors: William Rike, Bill Hlavin, John Forman.

### **CT-Christopher B. Poole**

39 Averill Pl., Apt. 2, Branford CT 06405.  
Sponsors: Jonathan Puliafico, Kenneth McDermott, Timothy Douthit.

## Applicants for Member

### **MI-Michael A. Brennan**

Malcolm-Pirnie, 1500 Abbott Rd., Ste. 210, East Lansing MI 48823. Sponsors: Marc Wahrer, Shane McDonald.

### **MO-Joy Kathleen Drake**

ENVIRON Intl. Corp., 156 St. Peters Centre Blvd., St. Peters MO 63376. Sponsors: John Imse, Wayne Weber.

### **MI-Kelly H. Fuks**

RMT, Inc., 1143 Highland Dr., Ste. B, Ann Arbor MI 48108. Sponsors: Vincent Buening, Graham Crockford.

## New Certified

### Professional Geologists

### **IL-Camie A. Knollenberg CPG-10617**

9926 132nd Street Ct. W., Taylor Ridge IL 61284-9551, (309) 794-5487

### **AK-Richard H. Harris CPG-10627**

551 Prospector's Trail, Fairbanks AK 99712

### **MA-Peter S. Cox CPG-10631**

ThermoRetec Consulting Corp., 300 Baker Ave., Ste. 302, Concord MA 01742, (978) 371-1422

### **MA-Michael S. Healey CPG-10632**

4 Pineview Terrace, Mansfield MA 02048, (978) 568-7899

### **WI-Timothy T. Eaton CPG-10637**

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### **MT-Cara J. Wright CPG-10638**

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## New Registered Member

### **GA-Wayne. Holt RM-0028**

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## New Students Adjuncts

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2013 S. Huron Pkwy., Apt. 9, Ann Arbor MI 48104

### **MS-Lance D. Yarbrough SA-0210**

Univ. of MS, Dept. of Geol./Geol. Engrg., 118 Carrier Hall, University MS 38677

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## IN MEMORY

**Russell B. Maurer**  
**CPG-03419**  
**January 2001**  
**Westminster, Colorado**

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Thanks to AGI, AIPG has, for distribution, colored 8½ x 11 flyers announcing Earth Science Week 2001. If you are able to use some of these announcements, or know an educator or other interested individual or group who would have an interest, please contact AIPG headquarters for details. The announcements are available at no cost.

Also, AIPG has a beautiful educational poster, created by AGI, entitled "Minerals - Foundations of Society." The poster has a colorful collage on one side and some mineral picture/word associations on the reverse side. The poster is designed to be an introduction to the wide use of rocks and minerals in basic everyday life. These also are available for educational use and at no cost.

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# Inaugural Joint Annual Meeting A Huge Success

John Howard, CPG-08740, General Chairman of the AIPG 2001 Annual Meeting

It has been three weeks and for some strange reason, I feel like I should be doing something towards planning the annual meeting. I guess I am going through withdrawals after having completed one of the most successful and adventurous undertakings that an annual meeting chairman has ever done.

All in all, the meeting was a huge success from the viewpoint of both AIPG and AEG. Meeting attendees commented that "why this had never been done before", "hope you plan on doing this again", and "great idea to pool resources and interests in a joint meeting." What started as a grand idea some four years ago, turned out to be a grand experience for all involved. The planning committee cannot be thanked enough for the level of effort and the sacrifices they made to pull their particular facet of the meeting together.

We are in the process of finalizing the final numbers for the meeting. But I can tell you that we had 472 registered (across all categories) attendees for the meeting. The table below provides a summary of meeting attendance by category.

The Gateway Arch Event was a once in a lifetime experience for all, including myself. As resident of St Louis, I doubt I will ever get another opportunity to visit the Arch without having to wait in long lines for the Tram to the top and to see the other attractions there. Combine that with the chance to have excellent food and drink, socialize with friends old and new, and you truly have a memorable experience.

The number and quality of the presentations were second to none for an AIPG annual meeting. As stated early in the planning process, AIPG would benefit from the more technical nature of AEG's annual meetings and

AEG would benefit from our professional development activities. Both organization came away from the meeting with a sense of what is possible for future annual meetings, whether they be joint or separate.

More important than understanding how each organization conducts their meetings, both organizations have a new perspective on the operation, management, and mission to the geologic profession of the other. This joint annual meeting gave AIPG and AEG executives, officers, and membership the chance to see each other in action and to sow the seeds for future cooperative efforts. Whether either organization takes anything from the meeting and makes any significant changes, remains to be seen. But if the comments of the meeting attendees are any indication, I suspect that the cooperative efforts

of AIPG and AEG will only continue to grow from this point forward.

In closing, let me take one last opportunity to thank all of those AIPG members who attended the annual meeting. The meeting would not have been a success without your participation. The planning committee feels that we have set a very high standard for future joint annual meeting efforts and I agree with them. But I do see one area where our efforts, can be surpassed. I would like to challenge AIPG members to begin planning now to attend next year's joint annual meeting in Reno, Nevada. Looking at the registration numbers, there is no reason that the registration shouldn't be a 50/50 split between AIPG and AEG meeting attendees.

| REGISTRATION                              | NUMBER ATTENDING |                  |            |
|---|------------------|------------------|------------|
|   | PRE<br>09/07/01  | POST<br>09/07/01 | TOTAL      |
| Full Meeting Registration: Full Member -- |                  |                  |            |
| AEG Members                               | 102              | 11               | 113        |
| AIPG Members                              | 52               | 2                | 55         |
| Members of both AEG & AIPG                | 26               | 1                | 27         |
| Full Meeting Registration: Non-Member     | 26               | 5                | 31         |
| Full Mtg. Reg.: Non-Member: comp exh.     | 45               | -0-              | 45         |
| Student (full time)                       | 25               | 1                | 26         |
| Student (volunteer)                       | 33               | -0-              | 33         |
| Spouse/Guest with Full Member/Non-Member  | 38               | 3                | 41         |
| Daily AEG Full Member: October 3          | 2                | 4                | 6          |
| Daily AEG Full Member: October 4          | 6                | 1                | 7          |
| Daily AEG Full Member: October 5          | 5                | 3                | 8          |
| Daily AIPG Full Member: October 3         | 2                | -0-              | 2          |
| Daily AIPG Full Member: October 4         | 1                | -0-              | 1          |
| Daily AIPG Full Member: October 5         | 1                | -0-              | 1          |
| Daily Both AEG/AIPG Full Member: Oct. 3   | -0-              | -0-              | -0-        |
| Daily Both AEG/AIPG Full Member: Oct. 4   | -0-              | 1                | 1          |
| Daily Both AEG/AIPG Full Member: Oct. 5   | -0-              | -0-              | -0-        |
| Daily Non-Member: October 3               | 3                | 1                | 4          |
| Daily Non-Member: October 4               | 12               | 11               | 23         |
| Daily Non-Member: October 5               | 4                | 4                | 8          |
| Daily Student: October 3                  | 2                | -0-              | 2          |
| Daily Student: October 4                  | 1                | -0-              | 1          |
| Daily Student: October 5                  | 1                | 1                | 2          |
| Teachers Workshop                         | 12               | -0-              | 12         |
| Corporate Registration                    | 2                | 5                | 7          |
| Short Course Only Limited Registration    | 2                | -0-              | 2          |
| Field Trip Only Limited Registration      | 3                | -0-              | 3          |
| OTHERS:                                   |                  |                  |            |
| Registration Personnel                    | 1                | -0-              | 1          |
| Exhibitors (not mentioned above)          | 3                | -0-              | 3          |
| <b>Total Registration: Non-Paying</b>     |                  |                  | <b>86</b>  |
| <b>Total Registration: Paid</b>           |                  |                  | <b>386</b> |
| <b>TOTAL:</b>                             |                  |                  | <b>472</b> |

## AIPG'S HONORS AND AWARDS PROGRAM

The American Institute of Professional Geologists (AIPG) has a history of effective and outstanding service to the profession of geology. From its beginning in 1963, the Institute has emphasized the role that professional geologists play in this fascinating, changing, and highly complex world in which we live.

In an Institute such as this, there are so many highly motivated geologists contributing to the profession, the Institute, the public, and the nations in which we live and work that the identification of a select few for particular awards is a monumental task. The continued success of the Honors and Awards Program is dependent on an accessible nominating process and a diligent screening of those nominated. This service is performed by the Honors and Awards Committee.

Currently, there are six honors bestowed by the Institute: Ben H. Parker Memorial Medal, Martin Van Couvering Memorial Award, John T. Gale, Sr., Memorial Public Service Award, Award of Honorary Membership, Outstanding Achievement Award, and Presidential Certificate of Merit.

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### Citation for SUSAN M. LANDON, CPG-4591 2001 Recipient of the AIPG Ben H. Parker Memorial Medal

*Susan Steele Weir, AEG Past-President, PG-710, Citationist*

The American Institute of Professional Geologists (AIPG) has a history of effective and outstanding service to the profession of geology through its membership. The Ben H. Parker Memorial Medal is the AIPG's most distinguished award presented to one of these outstanding members. It was established in 1969 to honor Ben H. Parker, a truly great leader, who devoted much of his life to improve the quality of geology and geologists and the services they provide. Susan M. Landon typifies the long-term continued leadership, dedication, distinguished outstanding service, and contributions to the geologic profession that is the Ben H. Parker Memorial Medal – 2001.



Susan M. Landon, born in Mattoon, Illinois, earned a B.A. in geology from Knox College in Galesburg, Illinois in 1972 and an M.A. in geology from the State University of New York—Binghamton in 1975. After receiving her master's degree, Susan joined the Amoco Production Company, Denver, Colorado, where she held various positions in exploration and development in the western United States, including the supervision of exploration groups in the Great Basin and Alaska. During this time, she was largely responsible for generating the play that resulted in drilling a well by Amoco to evaluate the mid-continent rift system in Iowa. In 1987, Susan moved to Houston with Amoco, where she became the geological training coordinator and later manager of exploration training. Her principal responsibilities included the development of curriculum to reflect changes in corporate strategy, budget, demographics, and technical advancements. She was responsible for approximately 100 technical courses taught worldwide each year, and for team teaching a course on fundamentals of petroleum geology for geophysicists and engineers.

In 1990, Susan returned to Denver, where she became an independent geologist with Thomasson Partner Associates. Currently at Thomasson Partner Associates, she is involved with oil and gas prospect generation and regional studies, as well as continuing to stay close to her love of teaching by presenting classes for oil and gas companies in the United States, Europe, Africa, and South America.

Susan's time, energy, and talents have been intensely dedicated to the AIPG through the years. She was certified in September 1979, President of AIPG in 1990, received the Martin Van Couvering Memorial Award in 1991, and honored by receiving the Ben H. Parker Memorial Medal in 2001.

As President of AIPG in 1990, she naturally sought new challenges and innovative ways to serve the AIPG, innovative ways of operating in AIPG that now seem like standard procedure. Under her leadership, the Executive Committee implemented advertising in AIPG publications, approved a standing active committee on Education in Earth Sciences, approved an ad hoc committee on Insurance for members, reactivated the standing committee on the Cooperative Evaluation of Geologic Departments, provided leadership as AIPG branched into the international arena, and was co-representative at the deliberations of the Court of Professional Geologic Organizations (CoPGO) to develop a national model registration bill for geologists.

In addition to the tremendous contributions she has made to AIPG, she has shared her time and talent with numerous other professional associations: 1) American Association of Petroleum Geologists (AAPG) Treasurer, 1992-1994, Honorary Member, 2000; 2) Rocky Mountain Association of Geologists (RMAG) Treasurer, 1977, President, 2001; and 3) American Geological Institute President, 1999.

Service to professional organizations is focused on the geologic community; service to the public community in an advisory capacity to local, state, and federal government touches many constituencies in order to provide geologic information and education. Even with the enormous commitment of time that Susan gives to the geologic profession directly, she is always actively involved with public service and education. From 1992-1997, she served as a member of the Board on Earth Sciences and Resources of the National Research Council. During that time, she was a member of the Board's

Executive Committee and Committee on Earth Resources, which she currently chairs. As part of her service to this distinguished Board, she spent time briefing key individuals in Washington on the activities of the Board and its committees. Also, she was appointed by the Governor to the Colorado Geological Survey Advisory Committee (1992-1997), appointed by the Secretary of the Interior to the National Geologic Mapping Advisory Committee (1997-2000), and serves on the National Petroleum Council (1999-present).

Susan has contributed continuously to the benefit of the geosciences through her work in the profession, professional association leadership, teaching, and public service for 25 years. Her dedication and contributions consistently strengthen and forward the geologic profession and she has been an inspiration and role model to all that have worked with her. It is befitting that the AIPG present its highest honor, the Ben H. Parker Memorial Medal to Susan M. Landon.

## Response

It is especially gratifying for me to receive the Ben H. Parker Memorial Medal from my AIPG peers in St. Louis. There is a town not too far northeast of St. Louis—Mattoon, Illinois, my hometown. It was a railroad town that sprung up in the middle of rich farmland underlain by significant amounts of oil. St. Louis was our “big city” not much more than two hours away once the interstate was completed. St. Louis was where I rode on an escalator for the first time; where I first visited a zoo; and where I first saw outcrops of rocks that intrigued me at an early age. Lambert Field, the airport in St. Louis, was where I got on a jet plane for the first time. AIPG will probably never have an annual meeting in Mattoon, so this is probably as close as we will get. A quirk of fate has arranged for me to receive this greatest honor from my colleagues here in the area that I got my start.

Geology fascinated me from the beginning. I learned the word “geology” in the fourth grade at a time when I already had an impressive rock collection, thanks to the variety of aggregate sources used by the railroads and the proximity of the Shelbyville Terminal Moraine. Before high school, I knew what my career would be. By college I was beginning to be selective and, more than once, I said that I would not be a petroleum geologist. I thought that career was boring. I had seen petroleum geologists at work as I grew up and knew that they sat in offices and worked on maps. Much of that work seemed to consist of erasing rather than drawing contours. I had a romantic vision of doing fieldwork in the Rocky Mountains and other exotic locations. Fortunately, there are times that I can admit that I am wrong! As I finished graduate school, I received a job offer from Amoco in Denver. Since then my career in petroleum geology has been rich and rewarding. I found that I have a passion for exploration—the thrill of the hunt and the sense of accomplishment from success.

As my career with Amoco developed, I realized that there was something missing. I missed the interaction I had with students and faculty with diverse geologic interests. I wanted to hear what geologists outside of the petroleum industry were discovering. I also learned that society was generally ignorant about geology and resources and I wanted a way to reach out to that broader community to share some of the excitement of geology with them. The Arab oil embargo and the growing concern for the environment emphasized the lack of geologic understanding of the general public.

John Pruitt invited me to my first meeting of the Colorado Section of the AIPG in the mid-1970's. The talk was fascinating. It was about geologic hazards in Colorado, a topic I knew very little about. John Rold was the speaker. I had hooked and soon joined AIPG. The first annual meeting I attended was in Williamsburg, Virginia. Prior to the meeting we spent two days in Washington, D.C., where I discovered that it is both satisfying and very frustrating to discuss geologic issues with federal agencies and even my own Representative.

Although I was (and am) active in other organizations, AIPG provides a unique blend of grassroots and national (and international) activities that show a willingness to actively dig into political issues. AIPG is one of the few organizations that attempts to unify the voices of the diverse groups of geologists. This blend is, in my opinion, exactly what the geosciences need.

I am still overwhelmed at the thought that I am being awarded the Ben H. Parker Memorial Medal. How can anyone believe that I have contributed a fraction of the effort and achievement of the men that have received this honor before me? I am fortunate to know several of these people and they have served as role models in my career and my service in AIPG. It is impossible for me to begin to thank all of those colleagues and friends that have had an impact on my career. I express heartfelt gratitude to my colleagues who now seem much more like family. Mattoon will always be home to me and, in another sense, AIPG also is my home.

### Citation for **Thomas G. Fails, CPG-3174** 2001 Recipient of the **AIPG Martin Van Couvering** **Memorial Award**

*William V. Knight, CPG-153, Citationist*

The Martin Van Couvering Memorial Award honors those members who have given unstintingly of their time, talents, and efforts to the Institute, in a manner reminiscent of its first President. Those few of us remaining who personally knew, remember, and respect Martin have a special appreciation of what a tremendous honor it is to be deemed reminiscent of him.



The recipient this year is Thomas G. Fails. Like Martin, he has given much of his abilities and personal resources in service to the Institute. And, he has helped to prepare his Section and our Institute for the future by serving in a number of major capacities.

Tom grew up in Springfield, Ohio, served in the United States Marine Corps, studied Petroleum Engineering at The Ohio State University, earned a Geological Engineer degree from Colorado School of Mines, and earned a Master of Arts in Geology from Columbia University. He has enjoyed a long, distinguished, and successful geologic career.

From 1955 to 1966, he worked in New Orleans with Shell Oil Company, rising to a management position. In 1967, Tom

opened the Trend Exploration, Ltd., office in New Orleans. He began European exploration in 1968, becoming Vice President for European Exploration in London in 1969, and remaining there for six years. In 1975, Tom became an independent in Denver, concentrating on Gulf Coast and European prospects.

Tom is a Certified Petroleum Geologist of AAPG, a Fellow of the Geological Society of London, a member of the New Orleans Geological Society, Rocky Mountain Association of Geologists, the Petroleum Exploration Society of Great Britain, and has been awarded the title of European Geologist by the European Federation of Geologists. He has published numerous papers on both salt dome geology and coal bed methane.

A few of his special contributions to AIPG deserve particular notice.

The Colorado Section presented him its Outstanding Service Award in 1991, 1993, 1996, and 2000. His Section services have been many, varied, extremely important, and often highly innovative. Following are some examples of his service to the Colorado Section and to his State. In each, his constructive influence has been felt.

- Member, Colorado Section Governmental Relations Committee, 1991-1994.
- Chairman, Colorado Geological Survey Committee, 1991-1994.
- Member, Colorado Section Advisory Board, 1993-1994, 1997, 2000.
- Co-Chairman, First Colorado Legislative Reception, 1993.
- Chairman, Colorado Section Legislative Awards Committee, 1994.
- Member, 1995 National Annual Meeting Planning Committee.
- Chairman, Colorado-Wyoming Collegiate Student Day Committee, 1996.
- Member, State of Colorado Geological Survey Advisory Committee, 1991-1994.
- Co-Chairman, 2003 National Annual Meeting Planning Committee.

National AIPG presented him the Presidential Certificate of Merit in 1995 and 1996. It had already put him to work. Following are some examples of his service to National, where his abilities and counsel have become highly regarded and prized.

- National Vice President, 1995.
- Member, AIPG Delegation to annual meetings of the Council of the European Federation of Geologists, 1998-2001.
- Member, Ad Hoc Committee for Bylaws and Policies Review, 1995-1997.
- Chairman, State Affairs Committee, 1996-1997.
- Convener/Moderator of the Political Relations Symposia, 1995 and 1996 Annual Meetings.
- Chairman, Task Force For Continued Professional Development, 1997-present.
- President-elect, 1998.
- President, 1999.

As the twenty-fourth recipient of the Martin Van Couvering Memorial Award, Thomas G. Fails exemplifies the ideals of ethics, scholarship, professionalism, dedication, and service that I remember so well in Martin.

## Response

When I was Certified by AIPG in 1976, I entered through the back door. The Department of Professional Affairs, AAPG, offered certification to members qualified as Certified Petroleum Geologists in 1967; thus my first CPG. I doubt whether I was even aware of AIPG's existence at that time. AAPG and AIPG offered reciprocal certification of CPGs during 1976 and 1977. Newly an independent geologist, I felt another certification from an organization that really appeared to be a true professional organization for all types of geoscientists had considerable appeal.

And so I became a typical apathetic, disinterested Certified Professional Geologist. I attended one or two Colorado Section luncheon meetings a year and one Annual Meeting, but otherwise did not participate in Section or National affairs. Unfortunately, this appears to be typical of most CPGs.

Epiphany is an overworked word. One meaning beyond the religious original is "a manifestation, especially of divinity." There is little of divinity in current usage. But I underwent an epiphany of a sort regarding AIPG in 1991. Volunteers were sought for a special Colorado Section committee to moderate a private sector-Colorado Geological Survey unfair competition dispute. Through this I met a number of Section CPGs who have become firm friends and colleagues. This led to increasing involvement in the Section's Government Relations Committee, which led the opposition to legislation very detrimental to the CGS in 1992. Although the bill finally passed, it was rendered less harmful due to successful lobbying by a number of Colorado CPGs. For me, the question "Why AIPG?" was answered. Given our state-oriented organization, AIPG is the only national professional geoscience society that can be consistently effective at local, state and national levels in advocacy with the public and people in government. Our political influence is relatively great, relative to our size. Between 1991 and 1994, I was heavily involved in Colorado Section as an Executive Committee member and as Chair of numerous committees. My National service has been as Vice President, President-Elect and President, and as Chair of the Task Force for Continuing Professional Development since late 1997.

The Task Force Proposal for a Certification Advancement and Maintenance Program was published during 2000 and conditionally approved by a membership majority in mid-2001. For those participating, points may be earned for continuing education, contributions to geologic literature, community service, professional practice and active participation in the activities and leadership of both AIPG and our national geoscience technical organizations. We all depend on our professional and technical geoscience organizations to provide the supporting framework on which we build successful careers as geoscientists. By means of websites, newsletters, publications, and annual conventions, they keep us informed of new developments in our rapidly changing science. They provide many continuing education opportunities, supplementing university courses and on-line geoscience education. My 45 years of successful geologic practice result in good part from continuing involvement with AAPG, the Geological Society, NOGS, RMAG, and PESGB on the technical side and America's premier professional geoscience society, AIPG.

Yet, all of these organizations are experiencing increasing problems. Why? Lack of support, both finance and personnel. AAPG and the GeoSoc have large memberships and success-

ful, revenue-producing publications programs. But AIPG's situation is more typical:

- heavy dependence on volunteers (only three and one-half paid employees);
- heavy dependence on dues revenues (about 85%)
- a fiscally unsuccessful publications program, so far.

The first of these relates to the most important Martin van Couvering Memorial Award criterion: service to the Institute. "A wide variety of contributions – by far the most important contribution a geologist can make to the Institute is that of time." Those previous awardees whom I know have impressed many with their unstinting contributions of personal time to the Institute. Some learned, as did I, that a conscientious, dedicated President-Elect and President will spend 20 to 30 hours per week on these positions. Why so much? Because with our small paid staff, much volunteer time is necessary to keep the Institute functioning, but far too few volunteers are available. This describes the situation of nearly all geoscience organizations in the U.S., Canada and Europe. If our science and profession are to thrive, more of you must meaningfully participate in organizational activities to make this happen. One way is to encourage more AIPG members to do so by earning points in our Continuing Professional Development program. Both the member and AIPG benefit.

The real payoff for my 11 years of heavy participation in AIPG affairs has been the opportunity to work with many dedicated CPGs on improving the Institute and moving it forward into the 21st century. Their cooperation, enthusiasm, ideas and innovations have made my efforts easier, in fact doable, over the years. It is with thanks, gratitude and appreciation for their "blood, sweat and tears," and for my long-suffering family, that I accept this Award as symbolic of AIPG's expressed recognition of our many successful joint efforts.

Citation for  
**John J. Dragonetti, CPG-2779**  
2001 Recipient of the  
**AIPG John T. Galey, Sr.**  
**Memorial Public Service Award**

*Robert H. Fakundiny, CPG-4977, Citationist*

The John T. Galey, Jr. Memorial Public Service Award was established by the American Institute of Professional Geologists to recognize exceptional service to the public at the national, state, and local level beyond normal professional responsibilities. John J. Dragonetti is this year's recipient for the extraordinary service he has given to the public and his fellow geologists throughout a distinguished career. It is an honor for me to be John's citationist, for I have known and worked with him for most of my professional career and realize the skill and care he has used in carrying out the responsibilities of his posts.

John is a New Yorker; he was born in New York City, attended school in the Bronx, and received a Bachelor of Science



degree in geology from Columbia University, where he also did graduate work. In the late 1960s, John left graduate school to take a position with the New York State Department of Transportation, where he supervised survey crews for major construction projects and conducted resource evaluations for construction materials. Later he joined the Department of Environmental Conservation, where he headed the State programs related to the regulation of oil, gas, and solution mining, mined-land reclamation, and siting of liquefied natural-gas-storage facilities and eventually became the Chief of the Bureau of Mineral Resources. He was the principal author of the exceptionally well-balanced New York State Mined Land Reclamation Law and regulations, which has served the public's interest while allowing careful mining.

John left New York to join the U.S. Geological Survey in 1979 and manage the Western Region of the Survey's Conservation Division. He transferred to USGS Headquarters in Reston, VA., as Associate Chief of the Office of Earth Science Applications and later as Assistant Director for Intergovernmental Affairs, where he acted as liaison to the State Geological Surveys, as well as many other State and Federal agencies when the Conservation Division was transferred to the Minerals Management Service. While at the USGS, Dragonetti earned a Master's Degree in Public Administration from the University of Southern California (USC) in 1990 and completed the coursework for a doctorate in Public Administration from USC as well.

After retiring from the USGS in 1995, John became Acting Director of the American Geological Institute's Government Affairs Program and built the solid foundation from which it now operates. He has continued as Senior Advisor to AGI and writes the bimonthly column on "Legislative Activities Affecting Geology" for AIPG's magazine, *The Professional Geologist*.

Among John's many honors are the I. C. White Memorial Award from the Eastern Section of the American Association of Petroleum Geologists for his support of the missions and goals of the State geological surveys within the Appalachian Basin. He also was the recipient of the New York State Department of Environmental Conservation Superior Service Citation in 1979, and the U.S. Department of Interior's Meritorious Service Award in 1988.

John Dragonetti is noted for the attention and help he has given to State geological surveys across the Nation and to his colleagues in AIPG, the Geological Society of America, the Society of Mining Engineers of the American Institute of Mining Engineers, and the History of Earth Sciences Society. He has always listened carefully, then acted swiftly to aid his fellow geologists and their causes. John J. Dragonetti has worked across the spectrum of governmental and professional geological activities and continues to serve with the professionalism that the John T. Galey, Sr. Memorial Professional Service Award honors.

## Response

It is indeed an honor to be included among that august body of mandarins who have received the John T. Galey, Sr. Memorial Public Service Award. In reviewing the list of former recipients, I am indeed overwhelmed. The thought that this honor might come to me one day never entered my mind. It is truly a great distinction to be listed among the earlier awardees who represent the highest standards of public service. Little

did I realize in 1954, when a neighborhood friend suggested that I enroll in a geology course that fossils, minerals and rocks would capture me for life. My professional career began as an engineering geologist for New York State, never dreaming that the next four plus decades would be within the realm of state and federal government. As the years rolled by, the rewards of a public service career became more and more apparent to me. This is not a concept derived solely from my own experience, but a belief that permeates the minds of the hundreds of public servants who have crossed my path throughout the federal government and the state geological surveys. Although every aspect of my career has been enjoyable and informative; from the days on a geophysical crew, through my several assignments within regulatory bodies, perhaps the most satisfying was acting as liaison to coordinate the missions of the USGS and the state geological surveys. Upon retirement from the USGS, it was indeed fortunate that the American Geological Institute was in need of someone to work in the Government Affairs Program. Reporting on congressional activities related to natural resources, environmental protection, and hazard mitigation are important issues for the geological community to consider.

It also has been a pleasure to serve AIPG where the concept of professionalism was central to the formation of the organization. The notion of professional credentials was a guiding parameter in the creation of the group several decades ago. The emphasis on ethics and professionalism is a fundamental aspect of public responsibility. I believe the many states that now license geologists were guided by AIPG's efforts to establish credentials for the proper application of the science.

I am pleased to have Bob Fakundiny serve as my Citationist. We both began our public service careers some decades ago in New York State and have had the good fortune to serve our profession together in various capacities.

Finally, I am deeply indebted to my wife Patricia and my children, Jay and Larisa, who have suffered through my many absences as my geological pursuits have kept me away from home more than any of us considered desirable.

**Citation for  
William V. Knight, CPG-153  
2001 Recipient of the Award of  
AIPG Honorary Membership**

*Charles J. Mankin, CPG-1415, Citationist*

William "Bill" Victor Knight is the recipient of the American Institute of Professional Geologists' Honorary Membership for 2001. In receiving this recognition, Bill joins a distinguished group of AIPG members who have contributed much to the success of our Institute and to the profession of geology. In his own right, Bill adds an additional luster to this award.

Bill grew up in West Virginia where he began his elementary education. He graduated from high school in Prosperity, Pennsylvania, then enrolled at West Virginia University, majoring in Civil Engineering in 1944.



That education was interrupted in 1945 by military service in the Coast Guard and then in the Army in Korea from 1946 to 1948. He completed his B.S. in Geology in 1951 at The Ohio State University. He later received a Master of Science in Geology from the University of Tulsa in 1968.

Following his B.S. in Geology, he was employed by The Atlantic Refining Company as trainee on a seismic crew in East Texas and later in the Big Horn Basin of Wyoming. Following this training period, he was assigned to the Kansas District Office in Wichita as a geologist. In 1956, he joined El Dorado Refining Company, where he was responsible for exploration and development in Kansas and the Southern Rocky Mountains. Following the acquisition of his company by Atlas Corporation who then sold their producing properties to American Petrofina (FINA), Bill became Exploration Manager for the Atlas Minerals Division of Atlas Corporation in Tulsa. Bill remained in this capacity until 1973, when the Atlas properties were sold. Rather than accept a transfer, Bill chose to remain in Tulsa and accepted a position with Williams Brothers Engineering Company where he began a new career in engineering and environmental geology. However, he kept his hand in exploration and development through projects in Alaska, the lower 48, Latin America, and Asia.

In 1978, Bill left Williams Brothers to form Knight Exploration Company. In this capacity, he participated in the creation of Associated Resource Consultants, a consortium of consulting firms, for which he served as Chairman.

Bill also has taught at the University of Tulsa and presented short courses for the Tulsa Technical Institute, Petroleum Information Corporation, and Society of Exploration Geophysicists. He served as Associate Editor of Tulsa's Physical Environment, a comprehensive publication produced by the Tulsa Geological Society in cooperation with the Oklahoma Geological Survey. He has authored numerous publications in professional and technical journals.

In 1964, Bill became a member of AIPG as CPG 153, the first in Tulsa. He served the Oklahoma Section in numerous roles, including President. In 1989, he became Executive Director of AIPG, and served in that capacity until 1999, when he returned to Tulsa and reactivated Knight Exploration Company. In addition to membership in AIPG, he is a member of several geological societies, including the American Association of Petroleum Geologists, and is an Honorary Member of the Tulsa Geological Society. Bill is a Chartered Geologist in the United Kingdom, holds the title of European Geologist of the European Federation of Geologists (EFG), and is licensed or certified as a Geologist in several states. In 1996, he received the Martin Van Couvering Memorial Medal.

Bill has contributed to our profession and our Institute in a multitude of ways—always with dignity and respect for those with whom he worked. The American Institute of Professional Geologists, our profession, and the public have been and continue to be well served by his efforts. I am honored to have the opportunity to present Mr. William V. Knight (CPG 153) for Honorary Membership.

## Response

I was told to be brief, so I will.

The first recipient of this award, my good friend Grover Murray, once told me that everyone needs a hero. AIPG has provided many, many heroes for me. Thank you all very much for that and for this honor.

I leave you with a short, anonymous verse that has been an inspiration for me over the years. I hope it will be for you, as well. I used it in my first column as Executive Director of AIPG and it seems fitting that I repeat it now.

"One ship sails east,  
Another west,  
On the self-same winds that blow.  
It isn't the gales;  
It's the set of our sails,  
That determines the way we go."

Again, thank you.

## Recipients of the AIPG PRESIDENTIAL CERTIFICATE OF MERIT

Presented by  
**Robert H. Fakundiny, 2001 President**

**Thomas M. Berg**—For accepting the challenge and successfully developing and leading a membership recruitment effort during 2001.

**Wendy J. Davidson**—For dedication to and competent support for the efforts of the 2001 President, Executive Committee, and Executive Director. And for continuous publication of an increasingly excellent *The Professional Geologist*.

**Thomas G. Fails**—For extraordinary dedication and genuine commitment to implementation of an AIPG Continuing Professional Development program.

**James A. Jacobs**—For tireless efforts to advocate for the principles of AIPG through the California Section and on behalf of professional geologists in general.

**Catherine A. O'Keefe**—For competent, professional service to the AIPG Membership and support for the efforts of the 2001 President, Executive Committee, and Executive Director.

**Ronald B. St. John**—For dedication and commitment to the successful organizing of the Illinois Chapter of the Illinois/Indiana Section of AIPG.

**John H. Talley**—For extraordinary dedication in organizing the successful 2001 AIPG Washington, D.C. Fly-In.

**HAPPY HOLIDAYS!**



## 2001 AIPG President's Awards for Student Posters

2001 AIPG Annual Meeting  
(held jointly with AEG)  
Hyatt Regency Hotel, St. Louis Missouri

### Graduate Division:

**1st Place:** \$500 cash award plus Associate AIPG Membership.

- **Lance Yarbrough** *The Effects of Riparian Vegetation on Bank Stability.* University of Mississippi.

**2nd Place:** \$100 cash award plus Associate AIPG Membership.

- **Erika C. Cohen** *Investigation of Earthquake Phenomena to the Republic Day Earthquake in India.* University of Mississippi.

**3rd Place:** Associate AIPG Membership.

- **Jennifer Thompson** *Hydrogeologic Investigation of an Alluvial Aquifer in Cape Girardeau, Missouri.* Southwest Missouri State University.
- &
- **Jon D. Wilson** *The Effect of Variations in Joint Orientation of Keyblock Size in Rock Slopes.* University of Mississippi.

### Undergraduate Division:

**1st Place:** \$250 plus Associate AIPG Membership.

- **Julie Ann Evans.** *Characterization of Dispersive Soils Found in Mississippi by the Pinhole Test.* University of Mississippi.

**2nd Place:** \$50 plus Associate AIPG Membership.

- **Emily A. Strack, Jennifer F. Henderson, Beth A. Reimer.** *Assessment of Arsenic Concentrations in an Agricultural Soil of Northern Mississippi.* University of Mississippi.

October 11, 2001

## AIPG Scholarships Awarded for 2001

The AIPG Executive Committee is pleased to announce the awardees of the 2001 AIPG student scholarships. They are Dean A. Brower, an undergraduate in Geological Engineering at Montana Tech of the University of Montana in Butte; Abigail L. McQueen, recently completed her fourth year at James Madison University and will be returning to JMU in the fall to fulfill the requirements needed to obtain a Bachelor of Science Degree; **Jennifer J. Pagach**, SA-0186, a student at Central Connecticut State University is currently completing an undergraduate Honors Thesis in which she is creating a GIS project of her own design to assess slope stability in West Hartford, Connecticut.

*In 2000, the Canadian Council of Professional Geoscientists (CCPG) and AIPG sought to cement existing ties based upon common objectives for advancing the profession domestically in our respective homelands and internationally between our organizations. The CCPG and AIPG Cooperation Agreement here is a fully executed agreement between our respective organizations. It is anticipated that CCPG and AIPG will continue to seek ways to cooperate and enhance career opportunities and the status of all geoscience practitioners.*



**COOPERATION AGREEMENT BETWEEN  
CANADIAN COUNCIL OF PROFESSIONAL GEOSCIENTISTS  
&  
AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS**

The Canadian Council of Professional Geoscientists (CCPG) is the national organization in Canada for provincial and territorial associations having the legislated authority to register geoscientists and the American Institute of Professional Geologists (AIPG) is a national professional organization in the United States of America which certifies professional geologists.

CCPG and AIPG recognize that their objectives with respect to the professional practice of the geological sciences are similar and further recognize the importance of cooperation as the practice of the geological sciences transcends national borders.

In recognition of these common interests, CCPG and AIPG enter into this Cooperation Agreement.

Under this Agreement, CCPG and AIPG agree to:

1. Recognize one another and each organization's status with respect to the geoscience professions in their respective countries.
2. Extend to one another a standing invitation for a representative of the other organization to attend all meetings, including those of any committee or subcommittee, at no registration cost.
3. Cooperate in developing a mechanism for the mutual recognition of standards across the Canada - United States border.
4. Cooperate in developing mechanisms for the mutual recognition of standards as well as the development and maintenance of beneficial liaisons with equivalent organizations beyond North America.
5. Cooperate in establishing contacts with other national and international groups involved in the registration of professional geoscientists and the regulation of the practice of geoscience.
6. This Agreement does not prohibit either organization from pursuing other cooperative agreements with other geoscience organizations.

**CANADIAN COUNCIL OF  
PROFESSIONAL GEOSCIENTISTS (CCPG)**

By: Philippe L. Revere  
Title: CHAIR  
Date: Oct. 2, 2001

**AMERICAN INSTITUTE OF PROFESSIONAL  
GEOLOGISTS (AIPG)**

By: Robert H. Edmunds  
Title: PRESIDENT  
Date: Oct. 2, 2001

# Comments From Incoming and Outgoing AIPG Executive Committee Officers

Larry Cerrillo, CPG-02763, AIPG President-Elect (President in 2002), requested comments from the incoming and outgoing Executive Committee Officers at this year's joint Executive Committee Meeting.

My term as vice president provided me with many opportunities to sense the vibrant nature of AIPG. We have a wonderful staff at headquarters. Our all-volunteer Executive Committee is a dedicated and insightful group of colleagues. The Officers and Staff serve the profession and the organization with distinction. I am grateful for the opportunities to work with them. My personal thanks to each of them. An added bonus for me was communicating with officers of every section and compiling their challenges and successes. Opportunities with AIPG provide wonderful ways to serve the profession.

**Robert G. Corbett, CPG**  
AIPG 2001 Vice President

I greatly enjoyed the opportunity of serving AIPG as Treasurer in 2001. I have learned a lot and felt gratified to give something back to my profession. I look forward to further serving the Institute in the same capacity for 2002.

**M.B. Kumar, CPG**  
AIPG 2001-2002 Treasurer

It was an honor to have served as a National Executive Committee Advisory Board Member. The experience was very positive for me personally and professionally and would highly encourage all members to be involved at whatever level they can.

**K. V. Duke Clem, CPG**  
AIPG 2001 Advisory Board Representative

It is a privilege to work with such a talented and dynamic group of people for the enhancement of the geologic profession—great synergy and energy in St. Louis!

**Richard M. Powers, CPG**  
AIPG 2002 President-Elect (2003 President)

I have discussed the idea of corporate membership with members of the Alaska Section. Everyone thinks this is a great idea, and I intend to make that one of my top priorities for helping to increase membership during my tenure on the upcoming Advisory Board.

**Robert N. Braunstein, CPG**  
AIPG 2002 Advisory Board Representative

I am honored to have the privilege to serve on the Advisory Board and I look forward to an exciting year.

**Ira S. Merin, CPG**  
AIPG 2002 Advisory Board Representative

I am looking forward to serving on the Advisory Board again. I want to be helpful in AIPG gaining greater recognition at both the State and National level and in supporting our members needs.

**Barbara H. Murphy, CPG**  
AIPG 2002 Advisory Board Representative

The synergy between the Past President, President and President-Elect is an early sign that the Institute has the staying power to become the premier professional geologic society.

**Kelvin J. Buchanan, CPG**  
AIPG 2001 Advisory Board Representative

A great way to experience first-hand the amount of work National does to promote the profession of geology, and develop some good friendships along the way.

It also provided an opportunity to travel around the country and sample the local microbrews..

**Michael D. Lawless, CPG**  
AIPG 2000-2001 Secretary

Going into my service on the Executive Committee I anticipated learning how AIPG works and how I can contribute and influence the organization. As well as all that, I gained career and personal growth. The task was well worth it and I plan on doing it again and again.

**Robert M. Rohlfs, CPG**  
AIPG 2001 Advisory Board Representative

It's a distinct honor and privilege to be associated with such wonderful volunteers for the profession of geology.

**James D. Shotwell, CPG**  
AIPG 2002 Vice President

Working on the Executive Committee this past year has been a great experience. By serving in this capacity I now better appreciate both the hard work that is necessary for the continued success of AIPG, and the sense of accomplishment that follows. I look forward to serving again this coming year.

**Dave A. Sadoff, CPG**  
AIPG 2001-2002 Advisory Board Representative

## RESPONSE TO COMMENTS

**Larry Cerrillo, CPG-02763, AIPG President-Elect**

Fear not those of you who have worked on government contracts and are going through your n-teenth iteration of "response to comments". My response, as is my nature, is to be brief. I cannot help but be encouraged by the responses received from incoming and outgoing board members. **DO WE HAVE A GREAT ORGANIZATION OR WHAT?**

I know there are many of you out there in addition to those who have served or are in line to serve this coming year. All are hardworking, dedicated professionals expressing through their work an appreciation for the benefits AIPG provides to its members.

I hope those of you who may not have had an opportunity to participate at the national level will become involved in your section and make it a premier section. A big hearty applause and thank you to all outgoing and incoming board members, and a special thanks to those outgoing members who have volunteered for other duties this coming year.

In closing, I would like to comment on membership by paraphrasing from, "Why athletes should NOT be role models." New Orleans Saints RB, George Rogers when asked about the upcoming season: "I want to rush for 1,000 or 1,500 yards, whichever comes first." Well I would like to see our membership increase by 300 or 500 members, whichever comes first!?! **MAKE IT A GREAT DAY!**

# 2001 AIPG•AEG ANNUAL MEETING – ST. LOUIS, MISSOURI



Top row: William Siok (Executive Director), Michael Lawless (Secretary 2000-2001), M.B. Kumar (Treasurer 2001-2002), Robert Corbett (Vice President 2001), Duke Clem (Adv. Board Rep. 2001), Dave Sadoff (Adv. Board Rep. 2001), Tom Berg, Gareth Jones, Michael McGowan, Robert Levich, David Abbott. Bottom row: Virginia McLemore (Editor 2001-2002), Kelvin Buchanan (Adv. Board Rep. 2001), Lawrence Cerrillo (President-Elect 2001), Robert Fakundiny (President 2001), and Richard Powers (President-Elect 2002).



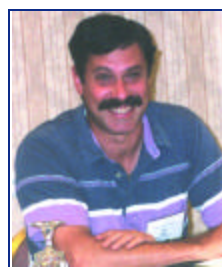
Larry Rhodes



Robert Braunstein



Lawrence Cerrillo



Ira Merin



Michael Lawless



K. V. Duke Clem



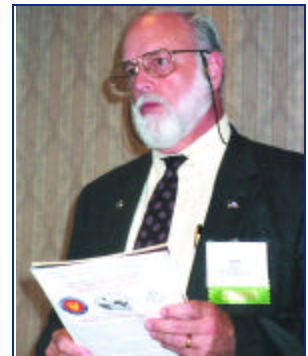
David Abbott and James Shotwell



Darrel Schmitz



Robert Corbett



Thomas Berg



Dave Sadoff



Rick Powers and Ginger McLemore



William Siok and Gareth Jones

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John Howard



William Knight, Michael McGowan, Robert Merrill, Dave Sadoff, Michael Hultgren, Robert Rohlfs, and Michael Lawless.



Mary Moran, Robert Braunstein, Duke Clem, Myrna Killey, Robert Corbett, and Larry Austin.



Mark Deering



Barbara Murphy, Jon Price, Charles Dimmick, Kerry Nikolaisen, Michael McGowan, and William Knight



Robert Levich



Charles Dimmick



Richard Powers



Ginger McLemore



James Shotwell, David Abbott, Richard Powers, and Lawrence Cerrillo