PROPOSED CONSTITUTION AND BYLAW AMENDMENTS

The AIGP Constitution and Bylaws will have to be revised if we are going to accomplish the long awaited unification of the professional activities of geologists and geophysicists. Actually, the revision is minor and more-or-less cosmetic except for the new policy board and the additional members of the Executive Committee.

The proposed new Constitution and Bylaws for the Association of Professional Geological Scientists (the name AIGP will be known by if unification is successful) is presented in full in this issue of TPG. Also presented is a proposed modification to create an associate member category. These documents are based on the current AIGP Constitution and Bylaws. The proposed changes are to overcome any objections and semantic problems and have been approved by AGI, their member societies, and the AGI legal counsel.

The present Constitution on amendments reads, "The Constitution may be amended . . . provided, that the proposed amendment has been read and an opportunity for discussion has been given at an annual meeting of the Institute. The vote on the amendment shall be conducted by mail." These proposed documents will be a major topic at the Annual Meeting in Tucson October 31 and November 1.

CONSTITUTION

ARTICLE I. NAME

The name of this corporation shall be the Association of Professional Geological Scientists.

ARTICLE II. STATEMENT OF PURPOSES

The purposes of the Association shall be:

1. To strengthen the geological sciences as a profession.

2. To establish professional qualifications for, and to evaluate continuously the conduct of, geological scientists.

3. To enhance and to preserve the standing of the geological sciences as a profession.

4. To establish ethical standards that insure the protection of the public health, safety, and welfare and the profession from non-professional practices within the profession of the geological sciences.

5. To monitor, at all levels, governmental and other activity affecting the geological sciences, and to communicate with the public and others concerning the profession of geological sciences.

6. To take all reasonable actions necessary to strengthen the geological sciences as a profession and to further the stated purposes of the Association.

ARTICLE III. CODE OF ETHICS

Section 1 - General Principles

1. The geological sciences are a profession, and the privilege of professional practice requires professional morality and professional responsibility, as well as scientific knowledge on the part of the practitioner.

2. Each Member of the Association shall be guided by the highest standards of business ethics, personal honor, and professional conduct.

3. Honesty, integrity, loyalty, fairness, impartiality, candor, fidelity to trust, inviolability of confidence, and honorable conduct are incumbent upon every Member, not for submissive observance, but as a set of dynamic principles to guide a way of life.

Section 2 - Relations of Members to the Public

1. A Member shall avoid and discourage sensational, exaggerated and unwarranted statements that might induce participation in unsound enterprises.

2. A Member shall not knowingly permit the publication of his reports, maps or other documents for any unsound or illegitimate undertaking.

3. A Member having or expecting to have beneficial interest in a property on which he reports must state in his report the fact of the existence of such interest or expected interest.

4. A Member shall not give a professional opinion or submit a report without being as thoroughly informed as might be reasonably expected, considering the purpose for which the opinion or report is requested.

5. A Member may publish dignified business, professional, or announcement cards, but shall not advertise his work or his accomplishments in a self-laudatory, exaggerated, or unduly conspicuous manner.
6. A Member shall not issue a false statement or false information even though directed to do so by employer or client.

Section 3 - Relations of Members to Employer and Client

1. A Member shall protect, to the fullest possible extent, the interest of his employer or client so far as is consistent with the public safety and welfare and his professional obligations and ethics.

2. A Member who finds that his obligations to his employer or client conflict with his professional obligations or ethics should have such objectionable conditions corrected or resign.

3. A Member shall offer to disclose to his prospective employer or client the existence of any mineral or other interest which he holds, either directly or indirectly, having a pertinent bearing on such employment.

4. A Member shall not use, directly or indirectly, any employer's or client's confidential information in any way which is competitive, adverse, or detrimental to the interest of employer or client.

5. A Member retained by one client shall not accept, without client's written consent, an engagement by another if the interests of the two are in any manner conflicting.

6. A Member who has made an investigation for an employer or client shall not seek to profit economically from the information gained, unless written permission to do so is granted, or until it is clear that there can no longer be a conflict of interest with original employer or client.

7. A Member shall not divulge information given him in confidence.

8. A Member shall engage, or advise his employer or client to engage, and cooperate with, other experts and specialists whenever the employer's or client's interest would be best served by such service.

9. A Member shall not accept a fee for referring an employer or client to a specialist or for recommending geological services other than his own.

Section 4 - Relations of Members to Each Other

1. A Member shall not falsely or maliciously attempt to injure the reputation or business of another.

2. A Member shall give credit for work done by others to whom credit is due and shall refrain from plagiarism in oral and written communications, and not knowingly accept credit due another.

3. A Member shall not use the advantage of salaried employment to compete with another member of his profession: the use of such advantages as tax sheltered facilities, equipment, privileged information and personnel is deemed to be unethical practice.

4. A Member shall endeavor to cooperate with others in the profession and encourage the ethical dissemination of geological knowledge.

5. A Member having specific knowledge of unethical practices of another geological scientist shall not recommend him for professional services to a client or employer, and shall avoid future association with the individual.

Section 5 - Duty to the Association

1. Every Member of the Association shall actively seek to prevent the election to membership of those who lack moral character, who have not followed these standards of ethics, or who do not have the required education and experience.

2. It shall be the duty and professional responsibility of every Member not only to uphold these standards of ethics by precept and example but also, where necessary, to encourage by counsel and advice to other Members, their adherence to such standards.

3. It shall be the obligation of any Member having positive knowledge of a departure from these standards by another Member, to bring substantiated evidence of such departure to the attention of the Association so that it can inform the Member of the problem and suggest compliance with these written standards.

4. By applying for or continuing membership in the Association, every Member agrees to uphold the ethical standards set out in this Code of Ethics.

ARTICLE IV. MEMBERSHIP

Section 1 - The Membership of the Association shall consist of geological scientists who qualify by standards of training, experience and integrity, as each is defined in the Bylaws, and who subscribe to the Constitution and the Code of Ethics of the Association. Members of the Association shall be known as Certified Professional Geological Scientists.

Section 2 - Other classifications of affiliation with the Association, and the qualifications, designations and limitations thereof, shall be established by the Bylaws of the Association.

ARTICLE VI. MANAGEMENT

Section 1 - The affairs of the Association shall be managed by an Executive Committee, assisted by the Advisory Board and the Policy Board.

Section 2 - The Executive Committee shall be constituted as follows: (a) Five (5) officers, consisting of the President, Vice-President, Secretary-Treasurer, an Editor, and a President-Elect; (b) four (4) Delegates chosen from the Advisory Board.

THE PROFESSIONAL GEOLOGIST
An Official Publication of the American Institute of Professional Geologists

OFFICERS

President ........................................ ARTURO O. SPALDING
Vice President .................................... ROBERT A. SIMPSON
Secretary-Treasurer ............................ DONALD E. HALLINGER
Editor ............................................... RUSSEL L. SHAPIRO

President-Elect, Chairman, Advisory Board .................................... JOHN G. HAINES

ASSOCIATION RESEARCH OFFICE

Department of Geological Survey, School of Mines, Denver, Colo.

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THOMAS L. THOMPSON .......................... Atlas Production Co., F.D. Box 501, Research Center, Tyler, Texas 75701
LARRY D. WOODFORD ............................ West Virginia Geological Survey, P.O. Box 875, Morgantown, W.Va. 26505

Executive Director .............................. ARTURO O. SPALDING
Board; (c) the Chairman of the Policy Board, and (d) the President and Vice-President of the American Geological Institute. The corporate affairs of the Association shall be conducted by the Executive Committee, which shall meet at least twice each calendar year and shall hold such required meetings in the 2nd and 4th quarters respectively. A quorum of the Executive Committee shall consist of a minimum of seven (7) Members. The detailed functions and responsibilities of the Executive Committee shall be provided for in the Bylaws. Each Member of the Executive Committee shall have an equal vote.

Section 3 - The Advisory Board shall consist of the President-Elect, who shall be its Chairman without vote, and a group of Association members selected annually from the State Sections of AGS as provided in the Bylaws.

Section 4 - The Policy Board shall consist of Association members selected annually from the member societies of the American Geological Institute as provided in the Bylaws.

ARTICLE VII. DISPOSITION OF ASSETS

The Association of Professional Geological Scientists is a non-profit organization. In the event of the dissolution of the Association, the Association shall distribute any assets remaining after the discharge of all liabilities, for charitable, scientific, or educational purposes in strict compliance with the Internal Revenue Code of 1954. It is recognized that, under these circumstances, no member of the Association shall have any rights or interest in or to the property or assets of the Association.

ARTICLE VIII. BYLAWS

The Bylaws as appended hereto are hereby adopted and may be amended, enlarged or reduced as provided in the Bylaws.

ARTICLE IX. AMENDMENTS

This Constitution may be amended by the Membership provided that, the proposed amendments must be in writing and must have been presented and debated at an annual meeting of the Association. The vote on any such amendments shall be conducted by mail ballot. The Secretary-Treasurer of the Association shall mail each Member of the Association a copy of the proposed amendment and an appropriate ballot. A favorable vote by two-thirds (2/3) majority of all votes cast and received by the Association within sixty (60) days after mailing of the ballot, shall be required for the adoption of any amendment which shall become effective immediately.

ARTICLE X. PARLIAMENTARY AUTHORITY

Section 1 - "Robert's Rules of Order", (newly revised) by Henry M. Robert, as from time to time amended, shall govern the proceedings of all bodies of the Association except where otherwise specified by the Bylaws.

BYLAWS OF ASSOCIATION OF PROFESSIONAL GEOLOGICAL SCIENTISTS

ARTICLE I. MEMBERSHIP

Section 1 - Classification

The Membership of the Association shall consist of one class, to be known as "Member", each of whom shall hold the title of "Certified Professional Geological Scientist".

Section 2 - Requirements

Members of the Association shall be geological scientists who have the training, experience and personal integrity described in Article I, Section 3 of these Bylaws; whose applications for membership have been submitted to a Screening Board and approved as hereinafter provided by Article I, Section 4; and who, after admittance to the Association, remain in good standing therein.

Section 3 - Qualifications

The qualifications for membership in the Association are:

A. Training

1) Graduation from an accredited institution of higher learning approved by the Executive Committee, with major study in geology, geophysics, geochemistry or geological engineering, with a minimum of thirty (30) semester (or forty-five (45) quarter) hours in geology, geophysics, geochemistry or their subdivisions.

2) Graduation from an institution of higher learning approved by the Executive Committee, with major study in petroleum engineering, mining engineering, or other branch of engineering, or in physical or biological science, with a minimum of thirty (30) semester (or forty-five (45) quarter) hours of undergraduate study in geology, geophysics, geochemistry or their subdivisions. For purposes of ascertaining such qualifications, physics and mathematical sciences shall be considered as subdivisions of geophysics; provided, however, that it shall be demonstrated to the unanimous satisfaction of the Executive Committee that the applicant's postgraduate training and/or experience have been preponderantly in the fields of geology, geophysics, geochemistry, or their subdivisions, and that his principal interests lie in these fields; or

3) In lieu of the above, an applicant will be considered qualified under this Section, upon unanimous vote of the Executive Committee, if he can demonstrate to its satisfaction, or a Committee of Examiners duly appointed by it, that he has acquired sound knowledge and proficiency, at least equivalent to that of a college graduate having a Master's degree, majoring in a field of geological science.

B. Experience

A minimum of five (5) years of experience in geology, geophysics, geochemistry, geological engineering or other geological science after the award of a baccalaureate degree or, in the event that a baccalaureate degree is not awarded, after the completion of the educational requirements specified in paragraph A of this Section 3, during which period the applicant has demonstrated professional competence, under responsible supervision, or self-employment. In the fulfillment of this requirement, one year of credit shall be allowed for the award of a Master's degree, and an additional year of credit shall be allowed for the award of a degree at the doctoral level. In no case shall the total academic credit exceed two (2) years.

C. Personal Integrity

1) A sustained record of adherence to highest professional and ethical standards, attested to by at least five (5) Professional Geological Scientists having present knowledge of the applicant's qualifications, integrity and conduct, and

2) Continuing membership in a Member Society of the American Geological Institute.

D. Reciprocity
For a period of two (2) years following the adoption of these Bylaws by the membership of the American Institute of Professional Geologists, the Association shall accept into membership those "Certified Petroleum Geologists" of the Division of Professional Affairs of the American Association of Petroleum Geologists, who make formal request by letter to the Executive Committee of the Association for membership in the Association, and those full members in good standing, of the American Association of Petroleum Geologists, the Association of Engineering Geologists, the Association of State Geologists and the Society of Exploration Geophysicists, who make formal application for membership in the Association; provided, however, that such automatic acceptance into membership in the Association shall be conditioned upon the organization named herein above, by its formal action taken on or before June 20, 1976, having agreed to support generally the reorganization of the American Institute of Professional Geologists, pursuant to the revision of its Articles of Incorporation, Constitution, Bylaws and Code of Ethics. The Association shall also extend membership to persons otherwise qualified to be members under this Article I, Section 3 who hold membership in such professional, international, or other organizations, as may be deemed by the Executive Committee to have standards comparable to those of the Association; provided, however, that any such organization must have extended reciprocal privileges of membership to Members of this Association.

Section 4 - Admission to Membership

A. Procedure

Application for membership shall be submitted in writing to the Secretary-Treasurer on a form authorized by the Executive Committee. The names of the applicants, with the names of the sponsors, shall be transmitted by mail to all members of the Association at intervals to be determined by the Executive Committee. An objection to any applicant by a member shall be submitted in writing to the Executive Director within thirty (30) days of the official mailing date of the circularization of the name of the applicant to the membership, with a full statement of the reasons for the objection. When an application is complete with all supporting material, but not less than thirty (30) days after the applicant’s name has been transmitted to the members, the application file shall be sent to the appropriate Screening Board which, after adequate review, shall forward the application file to the Executive Director with its recommendations. If the Screening Board is unanimous in its approval of the applicant, the application file shall be transmitted for review and recommendation by three (3) Officers of the Association. If no objection to the applicant is made by the reviewing Officers, the applicant shall be notified of his election to membership and the date of notification shall be the official date of his certification as a Certified Professional Geologist. Application which are not approved by all three (3) Reviewing Officers, shall be transmitted to the Executive Committee for final action. Approval of such cases shall require a three-fourths (3/4) favorable vote of the Executive Committee, which shall advise the applicant of its action. If the applicant requires unanimous approval of the Executive Committee as provided in Article I, Section 3A (3), such approval shall be granted notwithstanding any recommendations made by the Screening Board, and the applicant shall be notified of his election to membership.

B.

Any applicant rejected in the screening and approval process may file a written request for review with the President and, thereupon, be given a hearing before the Executive Committee at its next scheduled meeting so that a review of the action previously taken may be conducted. The applicant may produce evidence and witnesses may be questioned concerning charges, if any, and a final decision be rendered.

Section 5 - Rights of Members

A. General

All members shall have the right to vote; to hold office; to announce their affiliation with the Association on professional cards, professional reports or otherwise, consistent with dignified professional practice; to use the official Seal of Certification of the Association in a manner authorized by the Executive Committee; and to receive the official publication of the Association.

B. Seal of Certification and Certificate

Any member in good standing, who wishes to use the Seal of Certification approved by the Executive Committee, may obtain a personalized seal by making application to the Executive Committee, and accompanying the application with a deposit in the amount required by said Committee. The Seal of Certification shall remain the property of the Association and shall be returned upon termination of membership, whereupon the amount of deposit, in excess of the cost of the Seal shall be refunded. A Wall Certificate may be obtained by any Member desiring one by application and payment to the Executive Committee.

Section 6 - Duties of Members

A. Maintenance of Standards

It shall be the duty of all members to seek to maintain high standards of competence and ethics established by the Association. This policy shall apply to the member's professional activities and to his relationship to fellow members. If a member determines that he cannot abide by the requirements of the Association, he shall resign.

B. Complaints by Members

1) If a Member knows, or believes, that another Member is not abiding by the requirements of membership or the Code of Ethics of the Association, it is his duty to present a fully-documented report, under oath, to the Executive Committee.

2) Any complaints or charges filed by a Member shall be investigated by the Executive Committee during which time all reports and information, including the names of the Members involved, shall be held in confidence by the Committee. The Executive Committee shall either dismiss the complaint as not well founded, notifying the charging party in that regard, or shall refer the charges to the Ethics Committee for appropriate hearings prior to rendering a final decision as provided in Article IX.

Section 7 - Suspension or Termination

A. Resignation

Any Member may resign by submitting his written resignation to the Association. The resignation shall be without prejudice if the Certificate of Membership, Seal of Certification and other insignia belonging to the Association are surrendered and all dues and obligations to the Association paid. The resignation shall be accepted by the Secretary-Treasurer of the Association, who shall advise the resigning member that the privileges of the Association have been terminated. "Without prejudice" is defined as a condition under which the former member has no obligations to the Association in any form or
manner, and the Executive Committee has acknowledged this status.

B. Suspension

Any member may be suspended, at any time, for failure to pay dues for a period of ninety (90) days after the dues date thereof and shall be notified of his suspension. Thereupon his right to vote shall be automatically suspended but upon payment of back dues within one year after they became due, all rights including the right to vote shall be automatically restored.

C. Expulsion

Any member who has been found guilty by the Executive Committee of violating the Code of Ethics, the Constitution or Bylaws of the Association, or who shall have conducted himself in a manner unbecoming a Certified Professional Geological Scientist, shall be subject to expulsion upon the recommendation of the Ethics Committee and the final decision of the Executive Committee. Any member expelled from membership shall forfeit all rights and privileges of the Association. Such expulsion shall be exercised only after the accused Member has had a fair hearing, at which he has a right to testify personally before the Ethics Committee, to present testimony and to confront his accusers. In this connection, any matter, conduct or thing that, in the judgment of the Executive Committee, is injurious to the best interests of the Association, shall be held to be conduct unbecoming a Certified Professional Geological Scientist. A Member may be expelled for any cause deemed by the Executive Committee as adverse to the best interests of the Association.

D. Termination "With Prejudice"

A termination of any kind is recorded as being "with prejudice" if the terminated member fails to pay his outstanding debts to the Association, fails to return his Certificate, Seal of Certification or other insignia belonging to the Association, or fails to satisfy any other obligations to the Association.

Section 8 - Reinstatement

A. By application

Any person who has ceased to be a member by resignation or suspension, may be reinstated by applying for membership anew, and by paying his outstanding dues or obligations to the Association for the year in which he was suspended.

B. By Executive Action

The Executive Committee, by unanimous vote, may reinstate a former member under exceptional circumstances.

ARTICLE III. MANAGEMENT

The affairs of the Association shall be managed and operated by the Executive Committee with the assistance of the Advisory Board, a Policy Board, Standing and Special Committees, and local Sections.

ARTICLE IV. OFFICERS

As provided by the Constitution, the Officers shall be the President, Vice-President, Secretary-Treasurer, Editor, and President-Elect.

Section 1 - Nomination

Two or more nominees for each of the officers to be elected for the ensuing year shall be approved by the Executive Committee from among a list of members in good standing either submitted by the Nominating Committee not less than ninety (90) days before the Annual Meeting, or included in nominations that have been submitted to the Secretary-Treasurer, supported by petitions signed by not less than fifty (50) members in good standing, and received not less than ninety (90) days before the Annual Meeting. The approved ballot shall be mailed to all Members not less than sixty (60) days before the ensuing Annual Meeting.

Section 2 - Election

A. The President-Elect, the Vice-President, and the Secretary-Treasurer shall be elected each year. The Editor shall be elected in alternate years for a two-year term. The duly elected officers shall assume office on the first day of January of the year immediately following their election, and continue in office until their respective successors have been elected and qualified.

B. Election shall be by a plurality vote of all qualified ballots. In order to be counted, ballots must be received at Association headquarters at least thirty (30) days before the Annual Meeting. Ballots of members who are delinquent in payment of dues on the date of counting will be declared invalid.

Section 3 - Terms of Office

No member shall hold the office of President or Vice-President for two (2) consecutive years and no member shall hold the office of Secretary-Treasurer for more than three (3) consecutive years, or of the Editor for more than four (4) consecutive years.

Section 4 - Duties and Powers

A. President

The President shall preside at all meetings of the Association and of the Executive Committee. He shall perform the duties customary to his office, shall appoint all committees and boards of any type and their chairman, with the advice of the Executive Committee, and shall be an ex-officio member of all such boards and committees. In the event of the resignation
or inability of any elected officer to complete his term of office, the Executive Committee shall appoint a member to complete the unexpired term of the officer, except that in the event of the resignation or inability of the President-Elect to complete his term of office, the Executive Committee shall call for a special election by the membership to fill the vacancy.

B. Vice-President

The Vice-President shall have and assume the powers and duties of the President in the event of the absence or disability of the President and such other duties as are required of him by the Executive Committee.

C. Secretary-Treasurer

The Secretary-Treasurer shall act as the Secretary to the Association and Executive Committee and shall keep the records of their proceedings. He shall perform such other duties as the Executive Committee may direct. The Secretary-Treasurer shall have custody of the Corporate Seal of the Association.

The Secretary-Treasurer shall collect and disburse all funds of the Association, except as otherwise directed by the Executive Committee.

All funds, securities, and other investments of the Association shall be deposited, in the name of the Association, in the custody of a bank or trust company designated by the Executive Committee. The Secretary-Treasurer shall keep complete and accurate records of all receipts and disbursements and other financial transactions and of the funds, securities, and other investments of the Association, and shall submit all reports required by the laws of the State of Colorado and an annual report, and such interim reports, as may be required by the Executive Committee.

D. Editor

The Editor shall be in charge of the publications of the Association, shall have authority to solicit, accept, or reject, material for publication, subject to policy direction by the Executive Committee. He may appoint assistant editors to serve during his term of office. The Editor shall submit an annual report of his business to the Executive Committee.

E. President-Elect

The President-Elect shall serve for one year as such and, in the following year, he shall assume the office of President. He shall have no administrative authority except as a member of the Executive Committee and the Chairman of the Advisory Board. He shall be responsible for the preparation of the budget for the ensuing fiscal year.

ARTICLE VI. ADVISORY BOARD

Section 1 - Members

A. The Advisory Board shall be composed of one (1) delegate from each Section of the Association. Each delegate shall be either the President of the Section or his designated representative from the membership of his Section’s Board of Directors or Executive Committee.

B. Each delegate to the Advisory Board shall have one or more votes based on the membership of his Section. Each Section shall be entitled, upon organization, to one (1) vote, and additional votes for each one hundred (100) members of the Section, or major fraction thereof. The scale of representation intended shall be as follows:

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<th>Section Members</th>
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<td>151-250</td>
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and continued for each additional increment of 100 as required. The delegates to the Advisory Board shall be selected prior to the Annual Meeting to serve on an annual basis beginning with the first day of January next following their selection.

C. The Chairman of the Advisory Board shall be the President-Elect of the Association.

Section 2 - Duties and Powers

A. It is the duty of the Advisory Board to recommend to the Executive Committee the adoption of policies on membership certification or any other matter affecting the Association. It shall also assume such other advisory responsibilities as may be requested by the Executive Committee.

B. The Advisory Board for the succeeding annual period shall be convened by the President-Elect at the time of each Annual Meeting for the purposes of organization, election of its delegates to the Executive Committee (who shall serve concurrently with the newly elected officers) and for meeting ex-officio with the then current Advisory Board.

ARTICLE VII. POLICY BOARD

Section 1 - Members

A. The Policy Board shall be composed of two members selected annually (and consecutively) from each member society
of the American Geological Institute, whose individual members shall be eligible for certification by the A.P.G.S., or which society may otherwise be deemed eligible for representation by a majority vote of the Executive Committee of the Association.

B. The Policy Board shall elect from its membership a Chairman who shall be a voting member of the Executive Committee of the Association.

Section 2 - Duties and Powers

A. The Board shall make recommendations to the Executive Committee with respect to the external relations of the Association of Professional Geological Scientists with other member societies of the American Geological Institute.

B. The Board shall coordinate the specialty certification activities of the other societies of the American Geological Institute.

C. The Board shall review and recommend long range objectives for consideration of the Association as a professional organization.

D. The Board shall undertake such additional studies as may be requested by the Executive Committee, which are not normally within the purview of the Advisory Board.

ARTICLE VIII. COMMITTEES

Section 1 - Standing Committees

The Standing Committees of the Association shall be as follows: Awards Committee, Cooperative Evaluation Committee, Employee's Retirement Fund Trustees, Ethics Committee, Legislative Committee, Membership Committee, and Professional Employment Standards Committee. A member of the Executive Committee shall serve as Executive Liaison with each Standing Committee. Standing Committees shall report to the Executive Committee at the Annual Meeting, or at any time designated by the Executive Committee.

Section 2 - Ad Hoc Committees

The President shall appoint such ad hoc committees as may be needed, each with sufficient number of members to study the assignment as directed by the Executive Committee and with instructions to make a report, or reports, at specific intervals or within a specific time. A member of the Executive Committee shall serve as Executive Liaison with each ad hoc committee.

ARTICLE IX. GRIEVANCE PROCEEDINGS

Section 1 - Investigation

Charges of misconduct in violation of the Constitution and Bylaws of the Association shall first be submitted in writing to the Executive Committee at Association headquarters, by a member in good standing, with a full statement of the evidence on which the charges are based. The statement of charges and evidence shall be transmitted to the Ethics Committee for examination, investigation, and recommendation. If, in the judgement of the Ethics Committee, the facts warrant, the Ethics Committee shall file with the Executive Committee formal charges against the accused member.

Section 2 - Notice of Hearing

As soon as may be after receipt of such formal charges, the President shall appoint a Hearing Board of three members, including at least one (1) former president of the Association. Within fifteen (15) days of appointment, the Hearing Board shall fix a date and place for hearing the formal charges and so notify the accused in writing, mailed to him by registered mail at his last known address not less than thirty (30) days before said date, together with a copy of the formal charges.

Section 3 - Hearing

On the day fixed for the hearing, the accused member may appear with legal counsel before the Hearing Board, hear any witnesses called in support of the charges, and, at his option, cross-examine the same, present witnesses of his own, and submit oral or written statements in his behalf. The Ethics Committee and the Executive Committee may likewise present witnesses and have the right to cross-examine. The accused may, by registered mail, postmarked not less than ten (10) days prior to the date of the hearing, addressed to the Chairman of the Hearing Board at Association headquarters, waive personal appearance and request the Hearing Board to adjudge the matter on the basis of a written statement of his defense accompanying such letter. Failure of the accused to appear, or to submit a waiver letter and a written defense, shall not prevent the Hearing Board from rendering final advisory judgement and the Executive Committee from action on the basis of the evidence available on the hearing date.

Section 4 - Executive Committee Action

The advisory judgement of the Hearing Board shall be submitted to the Executive Committee for final action. The Executive Committee shall take whatever action it deems appropriate to the seriousness of the misconduct, which may be admonition, temporary suspension, or expulsion of the accused member. A report of the Executive Committee action shall be transmitted to the members of the Association.

Section 5 - Resignation

Resignation by the accused from the Association, at any stage in the foregoing described proceedings, shall automatically terminate the proceedings. Following resignation, the accused person so resigning shall not be eligible for reinstatement of membership under any circumstances in the future.

Section 6 - Expulsion

Persons expelled from the Association under these proceedings shall not be eligible for reinstatement to membership under any circumstances in the future.

ARTICLE X. REPRESENTATION TO THE AMERICAN GEOLOGICAL INSTITUTE

Each calendar year, either the President of the Association or a member of the Executive Committee designated by him, shall serve as the representative of the Association on the Governing Board of the American Geological Institute. The identity of the representative shall be stated in writing and placed in the records of the Association.

ARTICLE XI. SECTIONS

Section 1 - Organization

A subsidiary organization of the Association is a Section, which shall consist of not less than ten (10) members. Sections shall be organized so as to include members from one state only, except that where there are fewer than ten (10) members in a state, those members may join with members in a contiguous state or states to form a Section. The Section will be
named for the state or states from which its membership comes.

Sections shall be chartered only upon application to and 
approval by the Executive Committee. By majority vote, the 
Executive Committee may revoke the charter of a Section.

Section 2 - Functions and Limitations

A Section may conduct its own affairs so long as they ar
not in conflict with the Constitution and Bylaws of the Associa-
tion. The Bylaws of the Sections shall not be in conflict with 
those of the Association, and any changes therein shall take af-
fact only upon prior approval of the Executive Committee of 
the Association. No Section shall have the power to bind the Asso-
ciation by its action.

Section 3 - Screening Board

Each Section shall select a group of its members, known 
as a "Screening Board", whose duty shall be to screen applica-
ions from its area for membership in the Association. The size 
and organization of each Board shall depend on local needs, an-
x be determined by the respective Sections, with the approval of 
the Executive Committee. To provide technical breadth to the 
screening process, every effort should be made to include appro-
riate representation on the Screening Board of all specialties. 
In the interim, before a Section has been established, a Screen-
ing Board may be appointed by the President of the Association. 
All applications that are acted upon by the Screening Board shall 
be forwarded to the Executive Committee by the Chairman of the 
Screening Board, with the recommendations of the Board. Applicants 
for specialty recognition shall be referred to the appropriate 
organizations named in Article I of these Bylaws.

ARTICLE XII. MEETINGS

Section 1 - Annual Meeting

The Annual Meeting of the Association shall be held at 
a time and place determined by the Executive Committee and 
shall be announced to all members at least one hundred twenty 
(120) days prior to each Annual Meeting, by notices mailed or 
announcements published in the official publication of the Asso-
ciation.

Section 2 - Special Meeting

Special Meetings may be called, at any time, by the 
Executive Committee, provided notice is given in the same man-
ner and time required for the Annual Meeting.

Section 3 - Sectional and Local Meetings

Sectional and local meetings may be organized to suit local needs; provided such meetings do not conflict with meeting of 
the Association.

ARTICLE XIII. FINANCES

Section 1 - Fiscal Year

The fiscal year of the Association shall be the calendar year.

Section 2 - Fees

To help defray the expenses of processing applications, a
non-refundable fee of $5.00 shall accompany each application for membership.

Section 3 - Member Dues

Annual membership dues shall be $30.00 due and payable on the first day of January; except that, the annual dues for members who have retired from active employment shall be $15.00.

Section 4 - Initial Annual Dues

Initial annual dues shall be submitted by each applicant with his application, but such dues shall be held in a suspense account by the Association until final action has been taken with respect to that application. Upon denial of an application, dues held in suspense for that applicant shall be refund-
ed in full to the applicant. Upon approval of an application, dues held in suspense for that applicant shall be credited to the respective dues account of the applicant for the year in which he is notified of his election to membership; except that, in the case of a member who is notified of his election to membership after June 30, dues held in suspense for that appli-
cant shall be credited in full as payment of annual dues for the following calendar year.

Section 5 - Section Dues

Annual Section dues shall be due and payable with the annual dues of the Association. On or before October 1 of each calendar year, a Section shall submit written notification of its annual dues to Association headquarters, which shall add the Section dues to the Annual Dues Statement mailed to each mem-
er of the Association. Section annual dues collected by the Association will be remitted to the respective Sections periodically. Section annual dues are hereby limited to the following amounts: $0.00, $5.00, or $10.00.

Section 6 - Arrears and Suspension

Any member whose dues are in arrears for more than ninety (90) days after the due date shall be suspended from the Association, but may be automatically reinstated upon payment of dues in arrears and a penalty of $5.00. For the purpose of determining any arrearage in dues, Section annual dues shall be considered as being annual dues of the Association.

Section 7 - Fidelity Bond

All persons who sign checks, or otherwise handle As-
sociation funds or assets, shall be bonded at the expense of the Association in an amount determined by the Executive Com-
mittee.

Section 8 - Audit

The accounts of the Association shall be audited annu-
ally.

ARTICLE XIV. AMENDMENTS

These Bylaws may be amended or altered by an affirma-
tive vote of three-fourths (3/4) of the eligible voters at an An-
nual Meeting, provided that the proposed amendment has been 
approved by the Executive Committee or is contained in a writ-
ten petition, signed by at least twenty (20) percent of the mem-
ers of the Association, and is presented for discussion at an Annual Meeting.

These Bylaws may also be amended or altered by a mail 
vote of the members provided the proposed amendment has been 
approved by the Executive Committee or is contained in a writ-
ten petition, signed by at least twenty (20) percent of the members of the Association. A copy of the proposed amendment and an 
appropriate ballot shall be mailed to each member of the Associa-
tion. A majority affirmative vote of the ballots received
within forty-five (45) days after the mailing of the ballot is required for adoption of an amendment.

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Subject to action at the Annual Meeting, the membership of AGIPG will be asked to vote on the new Constitution and Bylaws. On the same ballot, the membership will be asked to vote on the following amendments. The amendments, if passed, would add an "Associate" membership category.

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Add to ARTICLE I. MEMBERSHIP

Section 9 - Affiliation

Provision is hereby made for the affiliation with the Association of those geological scientists who fulfill all the requirements for membership except the experience requirement and the requirement for full membership in an AGI Member Society. Such a geological scientist shall be known as an "Associate".

A. Requirements

An Associate shall be a geological scientist: 1) who has, as minimum qualifications, the training described in Article I, Section 3 of the Bylaws; 2) whose application is sponsored by three (3) members of the profession; 3) who is affiliated with an AGI Member Society, the class of affiliation required being that which is granted by said Societies to such geological scientists; 4) who, after having been granted Associate status, remains in good standing until the experience requirements described in Article I, Section 3B of the Bylaws have been fulfilled.

B. Admission

Application for Associate status with the Association shall be submitted to Association headquarters on a form authorized by the Executive Committee. The application shall be recorded and, when complete, shall be transmitted to three (3) members of the Executive Committee for review and recommendation. If the application is approved by three (3) members of the Executive Committee, the applicant shall be granted Associate status and so informed by the Executive Director. If any of these three (3) reviewers object to the application, the application shall be transmitted to the entire Executive Committee for final decision, and must receive an approval vote of three-fourths (3/4) of the Executive Committee before the applicant is granted Associate status.

C. Rights and Reservations

Associates shall have the right to vote and hold office in the Sections, to serve on Association committees that are not responsible for the screening or processing of any application or the review of confidential information regarding any Member, and to receive all official publications of the Association. No associate shall have the right to vote or hold office in the Association, to use the Seal of Certification or to use the title "Certified Professional Geological Scientist".

D. Suspension or Termination

The conditions and processes for suspension or termination from Associate status shall be the same as those described for members in Article I, Section 7 of the Bylaws, except for the addition of the following:

1) An Associate shall be automatically expelled from the Association if he is found guilty of using the title "Certified Professional Geological Scientist".

2) An Associate who has fulfilled the experience requirement for membership in the Association as provided in Article I, Section 3A, shall have six (6) months after fulfilling the experience requirement in which to apply for membership in the Association, or his affiliation with the Association shall be automatically terminated.

E. Reinstatement

The conditions and processes for reinstatement to Associate status shall be the same as those described for members in Article I, Section 8 of the Bylaws.

Add to ARTICLE XIII. FINANCES

Section 9 - Associate Dues and Fees

A. A non-refundable fee of $2.00 shall accompany each application for Associate status.

B. Annual dues for Associates shall be $15.00 due and payable on the first day of January. All requirements, credits and penalties pertaining to Member dues, as stated in Section 4, 5 and 6 of this Article XIII., shall be the requirements, credits and penalties pertaining to Associate dues.

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STATEMENT
of
Kenneth H. Crandall
American Institute of Professional Geologists
before the
House Ad Hoc Select Committee
On The Outer Continental Shelf
San Francisco, California
August 4, 1975

UNIVERSITIES OIL AND GAS RESOURCES
AND
PENDING OUTER CONTINENTAL SHELF LEGISLATION

My name is Kenneth H. Crandall of Piedmont, California and I am appearing today representing the American Institute of Professional Geologists of which I am a Charter Member.

I have been a practicing geologist for just over 50 years. Of these 44 were in the oil and gas industry, starting in what is now the Conservation Branch of the United States Geological Survey. I have worked with problems of estimating the size of undiscovered oil and gas resources for many years.

I have been a member of the American Association of Petroleum Geologists for 52 years, was its president in 1969-1970 and am an honorary member.

I worked with the National Petroleum Council as Special Assistant to the Chairman of the Committee on Future Petroleum Provinces of the United States, which conducted a survey of the oil and gas resources of the nation in 1959-1971 at the request of the Secretary of the Interior.

I was joint-convener of an American Association of Petroleum Geologists - Stanford University research conference on the subject, "Methods of Estimating the Volumes of Undiscovered Oil and Gas Resources" in August, 1974 at Stanford - where I have been Consulting Professor in the School of Earth
Sciences for 6 years. Among my courses are "Geology of Energy Sources" and "Offshore Exploration".

The general size of our undiscovered oil and gas resources is a matter of concern and question. Widely varying estimates of these have been made over the years which have caused considerable controversy and uneasiness. The variations are due to the varying backgrounds and experience of the estimators, lack of uniformity in definitions, different methods of estimation and, most importantly, differences in the availability and treatment of geological and geophysical data.

The very recent estimate of the U.S. undiscovered resources, made by the United States Geological Survey, by what could be called the subjective probability method, was a very good appraisal especially when it is considered that it was made under a deadline of 120 days with too little manpower and, importantly, too little information. Their estimate of a range of 30 billion barrels of oil resources having a 95% probability or confidence factor to 127 billion with a 5% probability and a similar range of 222 to 655 trillion feet of gas were much lower than previous USGS estimates. Many seized on the 50 billion oil figure as an indication that the resource base was so low as to question the desirability of encouraging the exploratory effort. However, when mid-point or "most likely" numbers are taken, 90 to 150 billion barrels of oil, plus 30 billion of "inferred oil", 18 billion of natural gas liquids, and about 91 billion barrels of oil equivalent of gas, we have a "most likely" exploration target of 209 billion barrels of oil and oil equivalent - approximately equivalent to what we have produced to date. This figure could be increased by changing the recovery factor for oil-in-place from the historical figure of 32% to a more realistic 40% and even to 60% - because of large improvements in technology and prices. The addition of those resources which could be found in waters deeper than 200 meters would also enlarge the target.

There are both purely statistical and geological methods of estimating such resources. The best methods are those which combine both. Naturally, the more and better the geological and geophysical information the more the estimate should approach the truth, though it is understandably impossible to make such estimates with accuracy. The oil industry has been making them for many years, however, and they form the basis for every day decisions on exploratory drilling and bonus bidding. Their inaccuracies, together with varying appraisals of political and economic factors, account for the wide variations in bids for Outer Continental Shelf (OCS) leases.

We all, including the Survey, realize that more data than was at their disposal is required to make a better estimate. The need is to apply somehow the hundreds of millions of dollars worth of geophysical and geological data and the expertise of geologists in the U.S. and state surveys, in industry and in the universities to this problem. The American Association of Petroleum Geologists, the world's largest geological association with 17,000 members, 12,000 of them in the United States, is willing to organize and conduct such an effort upon an invitation from a proper governmental authority. It would probably be organized in a manner similar to their Committee on Statistics of Drilling which has studied the trend and results of exploratory drilling for many years. The Association would be willing to do this as a service to the American people but there would be some minimal expense costs which would have to be funded. It would, together with possible continuing U.S. Geological Survey estimates, serve to fulfill the desires for such resource data expressed in H.R. 6218.

There is little question that we are encountering progressively greater difficulty in finding and developing sufficient domestic oil and gas reserves to ensure sustaining our economy until such time as alternate energy sources must take over an increasingly greater share of the burden - certainly by 1990 unless we are extremely fortunate in our exploration.

So, lead times being what they are, our emphasis must be on encouraging exploration and not on throwing road blocks - environmental, financial or regulatory - in its way. This is a matter of extreme urgency for our nation and the world's future.

From an exploration viewpoint, the immediate effects of changing legislation and governmental policy is well demonstrated. In 1974, after the large increase in the price of "new oil", the almost continuous decline in exploratory drilling from a high of over 16,000 wells in 1956 to 7466 in 1973 - was seemingly arrested by a 15.4% increase to 8,619 in 1974. The success rate also climbed from 20.35% to 23.31% through unfortunately, the size of the fields found was lower, only 11.9% of them having greater than 1 million barrels of oil or oil equivalent reserves as compared with 13.1% in 1973 and a range of 19-20% in the years 1968-72.

Subsequently, with the abolition of percentage depletion and the consequent slashing of exploratory budgets, both exploratory and development drilling have decreased in 1975. Where in 1974 it was most difficult to secure drilling rigs, casing and tubing, now many rigs are idle and stacked and the number of seismic crews has decreased. The exploratory tempo in Canada has also slackened greatly as a result of unfavorable governmental actions there.

I would suggest, therefore, that each portion of a law such as H.R. 6218 be designed in such a way that not only the public interest is protected but that you are convinced that a prudent oil operator would, even in the face of the large risks - geological, political and economic - see sufficient encouragement to enthusiastically desire to explore under its terms. With such an approach in mind, I would like to make a few suggestions:

Any release of confidential or proprietary geological and geophysical data by the government should be so timely and regulated that the operators will feel that they will have sufficient competitive advantage in originally securing the data to make the expenditure worthwhile. If otherwise, there will be no such exploration.

As to bidding procedures - the present system seems to have been quite successful, especially for the governmental standpoint. From 1953 through 1974 they have received from offshore bonuses, royalties and rentals $18,176,872,025 or 94% of the value of production to that date - $19,299,226,803. And this does not include income taxes received.

The large bonuses paid do, however, lock up large portions of the operator's capital, and, since the industry is experiencing difficulties in capital formation with debt ratios rising constantly along with high interest rates, some relief should be sought. The bonus funds - over $15 billion to date - have not advanced geological or geophysical work, or exploratory drilling and thus, in themselves, have not added one iota in finding or developing oil or gas. I would suggest that bonuses paid, or some portion of them, be made available to the operator to pay some portion of exploratory expenses, especially in drilling.

Separately, I believe that, instead of asking Interior to estimate the volumes of oil under the tracts to be bid on, its value and the economics of producing it, risking a disgruntled winning bidder when that oil or gas was not found, a better provision would be to have them place a value on the tract and specify that a top bid of or greater than that amount would be accepted. I do not know whether or not past practices of
rejecting bids have proven profitable to the government—whether a larger total amount has been received in later bids than would have been if the bids had been accepted—but I would suspect that I do know it has a great element of unfairness to the high bidder who has invested large sums in the exploration of the area and whose hand is exposed if his top bid is rejected.

Now as to the environmental protection area. Some way has to be found to speed the process and save on manpower and money. Conducting the baseline studies concurrently with the period before the lease sale, while the hearings are going on, should be standard procedure. A smaller environmental impact statement covering the exploratory phase with a later, larger one if and when production is established should be considered. Considerable time usually elapses between a discovery and actual development while a development program is being drawn up and processed and drilling and production platforms are being designed and constructed. Ways must be sought to carry on these activities concurrently rather than sequentially.

Some proposals have been made that separate leases be given for the exploration and production phases, with the purchaser of the exploration lease having assurance of being granted a producing lease after discovery. In my judgment such an arrangement is unworkable.

Efforts to involve even more bodies in the decision-making process are regrettable. Delays of over 2 years are possible in some suggested procedures. It is to be hoped that the Coastal States can be allocated a portion of the bonuses and royalties to the extent that, together with the economic benefits from possible oil and gas-related commercial and industrial activity at suitable locations onshore, they will be more eager to accelerate OCS exploration and development.

With regard to environmental or ecological damage, after over 25 years of offshore operations, the drilling of over 19,000 wells and production from 2,937 offshore platforms, I know of no proven instance of long term and important damage or degradation. Yet the numbers of birds, fish, and other aquatic species and their habitats are constantly increasing. One cannot help but wonder just what this terribleogue is from which we are seeking protection. To be sure, as we go into deeper and deeper waters, further from shore and into more hostile environments, we are going to have to develop new technology to handle our problems. The industry has proven itself capable of doing this in the past with only a very few instances of mistakes or failures and I believe they will continue to do so.

Our environment is not a static thing but forever changing. We are responsible for many of the changes, both good and bad. The making available of cheap energy which heats, cool and lights our homes, manufactures our necessities and comforts, and enable us to live like royalty has certainly changed our environment. If it becomes unavailable the reverse change will be dramatic and, I would venture, not acceptable to most of our citizens who have become used to the goodies cheap energy has provided. They will, of course, be forced to conserve energy increasingly, in any event, however.

It seems that, in addition to assessing the environmental impact of offshore oil and gas production, we must also examine the impact of not having it. Do we wish to preserve the environment in which we are living? We cannot do it without adequate energy supplies. I suppose most of you have seen those Texas and Louisiana bumper stickers—"Let New England freeze in the dark!"

In summation, I feel that our present laws, covering the OCS, are quite adequate. We could stand improvement in the bidding process, making some of the bonus available for exploration and stating a minimum acceptable bid. There is no reason for the government to conduct an exploratory program as such. Better resource estimates can be had by securing the services of the American Association of Petroleum Geologists.

Above all, let us not throw more obstacles in the way of oil and gas exploration but, rather, make every effort to expedite it. The impending critical situation is not going to just go away without a great effort. There is a real need for a sense of urgency. Involved governmental processes, procedures, and red tape have no place in a nation which may be fighting for survival. We have had enough "paralysis by analysis" already. Give industry the proper incentives, encouragement and assistance and then step back—with a minimum of regulation.

I appreciate greatly the opportunity to present my views to the Committee and assure you that the American Institute of Professional Geologists will render any assistance possible in your deliberations.

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AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS
TWELFTH ANNUAL MEETING
Wednesday 25 October – Saturday 1 November 1975

All AIGP members and the friendly Old Pueblo community, take special pleasure inviting you, your wives and guests to the Copper, Sun and Fun Capital of the great Southwest, Tucson, Arizona.

The Sheraton Pueblo Inn is headquarters for all activities. For the ladies, (men also welcome) an all day excursion to Nogales, Mexico, on Friday October 31 is planned and a tour of a major open pit copper mine that same afternoon for the men. (ladies also invited.) The Inn facilities include swimming, sauna and tennis and it is located within walking distance of the downtown shopping, civic and cultural center of the city, just off the I-10 Freeway.

A short drive from here are a dozen golf courses, the world famous Arizona-Sonora Desert Museum and many other unusual visitor attractions to entice your extended stopover.

As usual, the Advisory Board will meet all day Wednesday and the Executive Committee all day Thursday. They will break off in time to join everyone at the Poolside Ramada for a Get Acquainted Cocktail Party on Thursday evening. Remember, the nights are cool.

The general program theme: "Geologists—Tell It Like It Is—to the Public, our Lawmakers and Ourselves", will be told in a manner squarely facing the issues of the day, starting Friday morning, and highlighted by our featured speaker at the Annual Banquet Friday evening.

You should be among those participating and we look forward to seeing you in warm and sunny Tucson in late October.

PRELIMINARY PROGRAM
AIGP Annual Meeting—Tucson, Arizona
October 31—November 1, 1975

Friday Morning HOW TO SELL GEOLOGY
October 31 CAN WE LEARN FROM THE CORNFRAKE PEDDLERS?
Mr. Joel H. Weldon—Motivational Consultant
"The Science of Selling You and Your Ideas"
Mr. Loring K. Green—Dean Witter, Inc.
"What Future Has An Unemployed or Underemployed Geologist?"
LUNcheon And Business Meeting

Afternoon
Twin Buttes Field Trip – AnaMax Mining Company

Evening
Banquet

Saturday Morning
TO OUR LAWMAKERS
November 1
HOW TO COMMUNICATE WITH YOUR LEGISLATOR
Hon. Bill Lewis – Arizona State Legislator
"Natural Resource Legislation Activity in Arizona"
(Suggestions for geologists to be more effective)

Hon. Priscilla Robinson – Freshman Legislator – Tucson
"How to Lobby Effectively" or “Anyone Can Learn This Popular, Exciting Leisure Time Activity"

Jim Richardson – President, Arizona Mining Association
"How Trade Organizations Can Influence Legislation"

Jim Lacy – Verity, Smith, Lacy, Allen & Kerns
"The Role of Outside Counsel in Drafting Legislation" or “Care and Feeding of Your Lawyer”

Saturday Afternoon
TO EACH OTHER
November 1
COLLECTIVE BARGAINING FOR PROFESSIONAL ARE PROFESSIONAL SOCIETIES ENOUGH?
Hal Ammond – Association of Scientists and Professional Engineering Personnel
"Collective Bargaining for Geologists – What Does the Future Hold?"

Wallace McGregor – President, NW Mining Association
"Who Helps the Independent Geologist?"

Bryan Cowen
"The Role of An Umbrella Organization Such as ACGSA in Career Development"

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Is The Game Worth the Candle?
(Reflections on Registration of Geologists)
Ian Campbell

A short time ago, AIPG Editor Ross Shipman asked me to prepare a note on what I really thought about registration. (He knew that I had been a member of the California State Registration Board since its inception in 1968.) I chose this title because, despite its old-fashioned phraseology, it succinctly provides the key to the whole matter. Moreover, the title, though perhaps out of fashion today, may very well be in fashion tomorrow. Furthermore, it will serve to remind us all that oil and gas are finite resources, and that the time may come when we must again use renewable resources such as beeswax and mutton tallow (limited in supply as they are) for illumination.

But my task is not to preach conservation; rather it is to illuminate the problems of registration. Casting back some ten years or so when I was one of many (if not most) California geologists who, if not opposed to registration, was at least no more than lukewarm to the idea, I recall very clearly what changed my attitude. It all began with a number of disastrous landslides in southern California — the most notorious being the Portuguese Bend landslide of 1956. In the ensuing years several counties and cities enacted ordinances requiring geologic reports on proposed developments, especially in hillside areas. Although there was no great uniformity in these ordinances, virtually all stipulated that the required report be made by a “qualified geologist.” Who is a qualified geologist? Certainly the developers and the general public who needed his services did not know. And as always there were unprincipled characters who, seeing a new money-making opportunity, were quick to adopt the title of “geologist” with often the flimsiest professional backgrounds. Inevitably, therefore, each local government had to decide on qualifying criteria and establish its own local board to review applicants who wanted to practice in each local area.

The net effect was that, before long, a geologist who wanted to practice in the greater Los Angeles area must file all applications, pay fees, and pass examinations (each somewhat different) in perhaps half a dozen local jurisdictions. One did not need to look far ahead to see development of a wholly chaotic situation, based on local rivalries and pressures on local boards and governments. The simplest and the best solution seemed clearly to call for state-wide standards and state-wide controls, as had been in operation for many years in other professions, such as medicine, architecture, and civil engineering.

While enactment of state registration and regulation would simplify bureaucracy and make for economy in the registration process, the fundamental reason for state registration of any profession is the benefit of the public. This point cannot be over-emphasized, for all too often proponents of registration seem to think only that it will enhance the profession, will provide stature on the witness stand via-a-via an unregistered adversary, or will enable larger fees to be charged. But if these be the only reasons for pushing a registration bill, I would say, “Forget it.” Most thoughtful legislators will readily see through such selfish objectives. Unless they are convinced that their constituents will be benefited, the legislation will not (and, in fact, should not) go through.

No matter how high-minded the legislation, it must be recognized that the public benefit may be minimal. Yet in a state as prone to a variety of geologic hazards as is California, even “minimal” may represent a large dollar benefit through exclusion of the charlatans and supervision of the inept practitioners who otherwise would be, in a sense, “robbing the public” with useless or downright dangerous reports. At the same time, registered professionals do acquire an enhanced status. Yet in this there are handicaps as well as benefits — the nonregistered geologist may feel that he has unjustifiably acquired “second-class citizenship.”

Registration when first proposed in California threatened to bring a bitter schism within the profession. Petroleum geologists, in the nature of their practice, saw little need for registration; engineering geologists were eager to have it, as a solution to the multiplicity of qualifying boards. At one time it was proposed that only engineering geologists should be registered. Petroleum geologists, understandably, were not about to vote for something that would make them second-class citizens. Fortunately many geologists in all specialties within the profession recognized that it was to the ultimate benefit of all to work together. Thus the successful bill enacted in 1968 provided for registration for all qualified geologists, while those only with specific experience in engineering geology would be additionally certified as such. This solution was admittedly something of a political compromise and, as with all compromises, it has brought a good deal of unhappiness in certain quarters and in certain times. Nevertheless it has worked, and a certain unity has been maintained within a profession notorious for splitting into specialties and rivalries.

Another essentially political element in the registration bill was the inclusion of a “grandfather” clause. This is not unique to the geologists. No registration bill is ever likely to pass without some concession to those who have been practicing
their profession successfully for years but are so far removed from text books and school days that the mere thought of an examination brings panic. In the twelve-month period during which "grandfathering" was permitted, California received nearly 3,000 applications (almost one-third from outside the state). The standards provided for certain essentially minimal qualifications, and even these could not in all cases be fully tested. Thus there are licensed geologists whose professional aptitude and practice may leave much to be desired. Nothing can be done about this unless otherwise has taken place in the course of his practice, authors a thoroughly inept report and someone calls the attention of the board to it. At that time, and following a prescribed investigation procedure, the board can suspend or revoke his license. As yet, we have had no such cases, although the board has in a number of instances administered a sharp "rap on the knuckles" to some who were seemingly not doing their best. When violations of the act seem to have occurred, the board must work through the attorney general's office and its often over-worked staff who are extremely reluctant to undertake a case in which conviction may be at all uncertain.

The foregoing paragraphs are simply by way of providing background information before attempting an answer to the question in my title, which ideally would call for a cost-benefit analysis. Since the first applications were received in 1969, the California board has received in fees from the profession (most of which presumably has been passed on in one way or another to the public) some $540,000. Some of this has provided 400 certificates** (suitable for framing) to the registrants; some has paid for reviewing applications and denying licenses to obviously unqualified would-be practitioners; some has paid for design and administration of the six examinations that have been taken since the grandfathering period ended; some has paid for professional investigations of alleged violations of the act; some has provided for hearings employing expert witnesses before professional hearing officers in order to adjudicate equitably various disputed cases; some has provided information and data to other state boards and to groups in states desirous of learning details of the California law and experience; some has provided recompense (at $25/day!) to board members for time spent at board meetings; some has provided salary to one executive secretary and one assistant; some provides overhead and administrative charges to the State Department of Consumer Affairs, the agency within which the board is housed.

Has the game been worth the candle? How much has the public purse benefited from inclusion of charlatans; how much from improved practice on the part of some who in making a report would otherwise not have given of their best - knowing that no law or agency could call them to account? How much has the practicing geologist gained through increased stature in the courts and before civic bodies? How much has the profession gained through the unification that comes through efforts to bring about reciprocity in registration between the states? Clearly, there is no way of putting a dollar value on these benefits. My own best guess is that, thus far, the costs may perhaps have exceeded the benefits. But we have lighted a candle (California was the first state to establish registration for geologists under a board of geologists) that we hope will burn for some time, and perhaps ever more brightly. As the more imporant of the "grandfathers" pass on to future rewards (and accountants totaling examina- tion procedures lead to an improved quality of licensed practi- tioners, there is every reason to believe that, given time, the game will prove its worth.

**The figure includes approximately 900 seismologists, and also 300 engineering geologists who, in addition to certificates for registration as geologists, receive another "diploma" attesting to their certification as engineering geologists.

SECTION NEWS

CALIFORNIA

The 11th Annual Meeting of the Section was held in Bakersfield on October 4. Speakers included:

- Dr. C. M. Swinney, Manager, Energy Resources, Southern California Edison Co., Los Angeles. "The Economics of Coal".
- Francis J. Barker, Vice President, Natural Gas and Gas Liquids, Union Oil Company of California, Los Angeles. "The Energy Crisis From the Producer's Point of View".

COLORADO

Section President Cliff J. Nolte writes in the September Colorado Section Review:

Interest and enthusiasm among the membership is markedly improved judging from the attendance at our monthly meetings. This response can be credited to good programs, thanks to Dick Pearl, an active calling committee, well-timed meetings, and a greater feeling of professional responsibility among our membership.

An inordinate amount of energy was spent on the unification effort early in the year. The results have been very gratifying. With the expected approval of the AIPG membership at large the unification effort will be a great success.

Looking back -- a lot has been accomplished. Looking ahead -- a lot more needs to be done. Each individual member can make a significant contribution toward fulfilling his professional responsibility by attending the monthly meetings, by reading both State and National AIPG newsletters and communications, and by supporting your incoming officers by voting, volunteering your services and making your concerns and desires known.

To quote Wallace E. Pratt, "Let us all grasp the fact that we have a profession to cherish, as well as a science."

Our cherished profession, then, can best be strengthened by active professional members in a unified professional organization. And includes you and me.

MISSISSIPPI

The third quarterly meeting of the Section was held in Jackson on July 29th. Cocktails and dinner were followed by a business meeting where in one committee report, Bill Moore gave the recommendation made to the Mississippi Geological Survey by the FEER Committee; that a law requiring filing of cores and samples be passed by the Mississippi Legislature. Later, Robert E. Schmieg discussed Professional Registration in all its aspects. He did a thorough job.

Fred Mellen presided and appointed an ad hoc committee to study the whole registration picture, to shape a program and to advise the Section on a course of action. Schmieg was made chairman and the rest of the committee are Karges, Browning, Knight and Morgan.
Fritz and Morgan were appointed as a committee to draft a speech on the energy situation that could be delivered by any AFG Certified Professional Geologist to any education, business, social or professional group interested.

NEW MEXICO
At a meeting of the Section Executive Committee last January there was brief general discussion of registration of geologists, brought out mixed thoughts on whether registration under the Engineers' board would be preferable to a separate board (if such could be obtained). It was agreed that all those who could, would attend the Feb. 22, 1975 meeting of the N. M. Society of Professional Engineers in Albuquerque to discuss possible arrangements for registration. The consensus of all present was that registration of geologists is necessary for the good of the geological profession as well as welfare of the state.

OKLAHOMA
To encourage unification among all earth scientists (professors, industry professionals, government workers and students), the Oklahoma Section sent invitations to about 2,000 Oklahoma geological scientists to participate in our annual meeting in September at the Arrowhead Lodge on Lake Eufaula. In addition, the executive committee voted to pay the registration fees for five students from each of the major university departments of geology in Oklahoma. We feel that associate membership should be an important goal for the future of the Association of Professional Geological Scientists.

PENNSYLVANIA
In Harrisburg and in Pittsburgh, open meetings were held to discuss the draft of the "Proposed bill for the registration of geologists" in Pennsylvania. Notices of these meetings were sent to about 250 AAPG Section members, AAPG certified members, private industry and consulting firms, governmental agencies, and college and university departments. Both meetings had the same format; first, the proposed bill was read through, with short comments during the reading. Then the meeting was opened to more searching questions and discussion. A copy of the latest draft of the bill was provided to each participant. Many minor changes were made at meetings, all clarifying and abbreviating the bill. Most important were some critical additions to allow for: (1) Policing of the proposed board through requiring every 5-year-or-less public hearings on activities, rules and regulations (2) Clarifying requirements and rights of Geologist Trainees. (3) Providing direct appeal procedures for those who have failed registration.

Following the meetings, Earl Tarr, Chairman, Governmental Affairs Committee, and the Section President met and incorporated the meeting results into the bill. We expect an early review of the result by legal counsel, rescheduling if necessary, then introduction of the bill into the Legislature in September. If this schedule is maintained, then by the end of October the bill may be printed by the Legislative Reference Bureau. The Section will acquire a number of copies and will make them available at the cost of mailing.

WASHINGTON
The section held its annual summer meeting on August 17. President Jerry Sweeney called the meeting aboard the "Tres Chic" docked at Westport, Washington. The meeting was called to order at 6:00 a.m. and after a short business meeting headed about 10 miles out to sea for a day of salmon fishing.

President Sweeney tendered his resignation as of this meeting. Jerry Thorsen and Don Ford have sent to all state members a questionnaire to poll the members feelings on the future direction and goals of the section.

WEST VIRGINIA
The recent tri-state AIGF landslide field trip and dinner meeting of the West Virginia Section in Wheeling was a great success.

A panel consisting of Ben Wilmoth and the West Virginia Section executive committee discussed the proposed West Virginia registration of professional geologists bill with the Appalachian Geological Society in Charleston on September 9th. Ben presented a brief overview of the current status of registration of geologists throughout the country, then summarized the salient features of our proposal.

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PROFESSIONAL PARAGRAPHS

THOMAS A. SIMPSON has resigned as the assistant state geologist of Alabama to accept a permanent faculty position as an associate professor of mineral engineering with the Department of Civil and Mineral Engineering at the University of Alabama. Tom's new mailing address is: P.O. Box 1488, University, Alabama 35486.

Gulf Oil Corp. has announced that M. J. HILL will be president of GEM-International. Gulf's new extractive industries company, Gulf Energy and Minerals Co. (GEM) will headquarter in Houston, Texas. Edward B. Walker, formerly an executive vice president of Gulf Oil Corp., will be president of GEM. L. A. Ramsey, formerly an executive vice president of Gulf, will be president of GEM-U.S. and HILL, who was a senior vice president of Gulf, will head the new company's interational operations.

Dr. JEROME A. EYER, formerly director of geologic research in the research and development department of CONOCO in Ponca City, is now chairman of the Department of Geology and Geophysics at the University of Missouri-Rolla.

EXECUTIVE COMMITTEE HARD AT WORK
July 11 Meeting

Dear Editor:

In response to an article in The Professional Geologist of December, 1974, I would like to make a few brief comments about the status of Sigma Gamma Epsilon and its role in the registration of professional geologists. Sigma Gamma Epsilon is not "lanquishing" but, rather, is undergoing a growth spurt that may very well be unprecedented in the history of the society. Five chapters were added to S. G. E. last year and three have been added this year. Two additional chapters will probably be installed later this year. We now have over 700 members in nearly 70 chapters across the country. This would seem to me to indicate that we are not only alive and well but growing rapidly. The efforts made by this society, both formally and informally, to inform students of the advantages and disadvantages of the registration process have, however, been few. Insofar as one of the primary goals of S. G. E. is to encourage students to adopt a professional attitude in the study of geology and related subjects, it would seem altogether consistent that we, in addition, go at least as far as informing our membership of the potential advantages of registration and encourage them to investigate this possibility as they begin a professional career.

To test the notion that there might be some interest in the subject of registration, I arranged a meeting of our local S. G. E. chapter at Kent State University where Dr. Murray McComas, a Certified Professional Geologist, presented the basic outline of the certification procedure and discussed many of its advantages. The meeting was very enthusiastically received and the general response of the students was "why haven't we heard about this before?". Sigma Gamma Epsilon, as it has been for the past 60 years, is producing graduates who are entering the geologic profession with every bit as much professional sense of responsibility as students have had at any time in the past. We intend to continue doing so and could very probably demonstrate our past success in this effort by observing that many members of the American Institute of Professional Geologists are ex-S. G. E. members. Feedback from these alumni into their own S. G. E. chapters could certainly do a great deal toward even greater strengthening of our organization. We welcome input from any organization dedicated to the betterment of the geological profession and certainly would enjoy having made available to us, from the A. I. P. G., information that would enable us to further discuss the merits of certification in local chapters.

Alumni of Sigma Gamma Epsilon who are now members of A. I. P. G. might continue to serve both organizations by reaffiliating with S. G. E. either as Active Alumni ($1.00 per year) or as Life Members ($100.00). Either membership will assure regular receipt of "The Compass" and will go a long way toward strengthening the bond between the two organizations. Further, any A. I. P. G. member would, I am certain, be welcome to visit nearby chapters. I would be more than happy to supply addresses of chapters to any member upon request.

Sigma Gamma Epsilon has been continuously providing a sense of "belonging" to the geological profession since 1916. We hope to continue, and improve on, this record in the future. Your awareness of our organization and your support of it would be greatly appreciated.

R. M. Feldman, Editor, S. G. E.

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In December of 1974, LUTHER W. HYDE appeared before the FIA to testify on siting a refinery in Baldwin County, Alabama. He represented the county government in his testimony and concluded by saying, "we in Baldwin County, Alabama, realize the need for and lend support to the development of oil refineries and their associated services. We strongly urge that decisions about site selection include a major input from the local governmental level, keeping in mind the interest of the State and the Nation."

On June 6, 1974, EDWARD E. RUE appeared before the Senate Finance Committee to testify on percentage depletion. He traced the history of the concept of depletion and concluded by saying of the energy problem, "nothing will be solved without materially increasing our domestic crude production, and that takes exploration, and that takes romance money, and that takes a depletion allowance. A depletion allowance that is there for good, not brandished around like a whip on the very group of people that can help solve the energy problem." In sending a copy of his statement to TPG, Bud Rue writes that, "It is interesting to note that some 50-odd minerals have the same 22% depletion allowance which a few oil producers are still allowed to use. As you probably are aware, depletion allowance for each mineral was arrived at by assuming a replacement value. Therefore, based on the difference in cost between wellhead prices and the cost of oil and gas in the ground, oil and gas depletion should be in the neighborhood of 40% rather than 0 to 22%.

BURDETTE A. OGLE represented AIPG at two hearings during August. He testified at the U. S. House of Representatives Ad Hoc Select Committee hearing in Los Angeles on the CSG on August 2, 1975 and on August 25, 1975 Dr. Ogle appeared at the USGS Hearing on Draft Environmental Statement on the Santa Barbara Channel. Dr. Ogle writes of the August 2nd hearing, "Since the committee crammed the industry witnesses into the very end of the meeting, the oral presentation had to be bobs-tailed and questions were written and handed to me as I was going out the door. I later responded by letter to the committee with answers to those questions. This turned out to be longer then the testimony. These questions give a good example of the adversary nature of much of the committee and the honest state of ignorance (I think) of many on the committee (and staff)."

(As space permits, we plan to publish these questions and answers. The editor.)

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INTERPROFESSIONAL RELATIONS COMMITTEE
Richard E. Gray, Chairman

The Executive Committee asked the Interprofessional Relations Committee to concentrate on local interprofessional relations. Many sections have conducted joint meetings with other local technical and professional groups and AIPG speakers have presented talks to such groups. It is our responsibility to make others aware of the scope and breadth of the geological sciences and interests of the geologic profession. You, as an AIPG member, should actively support such programs conducted by your section. If your section does not have an interprofessional program, urge your section officers to develop one. If each of us actively attends only one meeting of another profession this year, introducing ourselves as a geologist, a significant improvement in AIPG's interprofessional relations will be achieved.
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