

FOREWORD

Ethics and Professionalism in the American Society for Photogrammetry and Remote Sensing

PAPERS AND DISCUSSIONS regarding ethics must necessarily combine their inevitable companions, professionalism and professional conduct. The American Society for Photogrammetry and Remote Sensing (ASPRS) has recognized the importance and interrelationship of these terms throughout its existence. It is, therefore, important to review the efforts of the Society through the past 56 years, and to project into the future the need for all members to be aware and alert to the fundamental requirements of our profession: professional honesty and high standards of ethical conduct.

The American Society of Photogrammetry (ASP) was founded in 1934 by a group of individuals who banded together to promote and expand the science of photogrammetry. These 12 men were government employees, private businessmen, surveyors, engineers, pilots, and aerial photographers who shared a common bond of scientific curiosity, business sense, and a desire to foster the advances in photogrammetry that had developed in the various European countries in the latter part of the twentieth century. They were men of integrity and honor who witnessed the use of aerial photographs in World War I, and they foresaw new applications for peacetime in "planning the development of large river valleys; forest belts to modify the climate of vast areas; to prevent soil erosion; and extensive mapping of physical data."

The early meetings of the Society were marked with technical papers and discussions concerning ongoing aerial mapping projects. The Board of Directors were concerned with professional standards of work and the conduct of the members. A substantial number of the aerial photography projects were awarded to the low bidder because identifiable work standards and performance values had not been established. The companies providing aerial photography soon acquired photogrammetric instruments, and these organizations provided the leadership in employing engineers and surveyors for mapping work.

A substantial step in establishing the profession occurred with the work in the Tennessee Valley by the joint mapping efforts of the U.S. Geological Survey (USGS) and the Maps and Surveys Division of the Tennessee Valley Authority (TVA). In order to cope with the directives of Congress which authorized the TVA on 18 May 1933, a vast surveying and mapping program using aerial photographs was implemented. Detailed instructions and standards were published to cover the various phases of the Surveying and Mapping operations. Engineers, surveyors, and scientists were recruited to fill positions in the field and office assignments. USGS personnel assigned to stereo-photogrammetric mapping were started as professional engineers, P-I Civil Service grade.

The war years of 1941-46 brought a tremendous demand for aerial reconnaissance, map revision and map up dating, topographic mapping, and the need for highly skilled and trained personnel. A series of courses in photogrammetry, optics, and advanced surveying was started at Syracuse University in 1932 under the leadership of Doctor Earl Church. Later, other colleges and universities added courses in photogrammetry and higher surveying to their Civil Engineering curriculum, and more professional people joined the aerial mapping companies and mapping units of the Federal Government.

The publications of ASP reflected a growing concern for

professional standards of work and professional conduct. In 1953 the incoming President of the Society announced as one of his objectives, "that we should double our efforts toward professional recognition of our work." A Professional Status Committee was established, and that committee contacted the various State Registration Boards regarding the licensing of persons engaged in photogrammetric work. The response from the Boards indicated; one, an over all lack of knowledge and/or interest in photogrammetry; two, the need for photogrammetrists to obtain registration as qualified engineers; and three, that photogrammetrists should develop their own professional image.

In 1956 the Surveying and Mapping Division of the American Society of Civil Engineers (ASCE) implemented a Task Committee to study and report on the status of Surveying and Mapping. Specifically, the Committee was asked, "Is Surveying and Mapping a professional activity," and "Is Surveying and Mapping a part of the Civil Engineering profession." After three years of serious study, the Committee concluded that Surveying and Mapping was a professional activity, and that it was a part of the Civil Engineering profession. The Committee submitted a "Classification Chart for Surveying and Mapping" along with basic definitions for Land or Property Surveying, Engineering Surveys (for design and construction), Geodetic Surveying, and Cartographic Surveying. Photogrammetric procedures were recognized as an integral part of Surveying and Mapping activities.

The report was accepted by ASCE and was adopted as ASCE policy in February 1959. The ASCE policy was adopted by ASP and was a big step forward in establishing a professional image for Surveying and Mapping and Photogrammetry. Contracts for mapping projects were awarded on the basis of professional qualifications and professional negotiation of fees, and the profession responded with a renewed professional attitude and responsibility.

Additional study and work by the Committee, then called the Professional Activities Committee, led to the development of a program for the certification of photogrammetrists by the Society. The plan was approved by the ASP Board of Directors on 13 March, 1975. The Program declared, "In simplest terms, certification is official recognition by one's colleagues and peers that he or she has truly demonstrated professional integrity and competence. As such, the ASP Voluntary Certification complements, but is not a substitute for, registration which is a legal act on the part of the several States..."

The Program requires applicants to submit a detailed outline of their experience and qualifications which is reviewed by an Evaluation Committee; a declaration of compliance with the ASP Code of Ethics; and the establishment of a Professional Conduct Committee to investigate allegations and complaints involving the Certified Photogrammetrists.

The Certification Program has been well accepted and a substantial number of members have been accepted and approved as Certified Photogrammetrists by the Society.

In 1972 Congress passed the Brooks Bill - now Public Law 92-582. This law states in part, "it is the policy of the Federal Government to publicly announce all requirements for architect-engineer services and to negotiate contracts for such services on the basis of demonstrated competence for the type of

professional services required and at a fair and reasonable price. "Subsequent legislation makes it clear that Surveying and Mapping services are included in the interpretation of the Law. While the Law applies only to Federal contracts, great effort is being made to point out to state and local government agencies and private business, the advantages of utilizing the Brooks Bill concept in all surveying and mapping contracts.

In 1981, the Society established the Professional Practice Division and assigned the following goals to this new Division: To establish and protect the professional aspects of the profession of photogrammetry; to put real meaning into the use and applications of the Code of Ethics; to establish and work with the Professional Standards Committee for the conduct of professional and technical work; to promote and prepare articles for general distribution to educate and advise clients regarding photogrammetry on a professional basis; and to be a means of fostering an exchange of technical ideas.

Currently the Professional Conduct Committee is working on further clarification of the rules for the review and disposition of the ethical conduct cases that are brought to its attention. There is a strong feeling that the Code of Ethics should apply to all members of the Society rather than only to the Certified Photogrammetrists. The Code of Ethics must lend itself to changing conditions, it must be enforceable, and it must be enforced. Members of the Society must be kept informed as to the consequences of unethical conduct and actions. While it is

true that ethics and ethical conduct are matters of personal integrity and responsibility, the American Society for Photogrammetry and Remote Sensing has acted as the guide and guardian of the ethical conduct of persons engaged in photogrammetric work. This is a most important responsibility and one that cannot be taken lightly. The Society has, through its various committees, publications, and meetings, brought the matter of ethics and ethical conduct to the attention of its members.

Under the leadership of Past President Rex McHail, the Professional Conduct Committee asked a number of members of the Society to describe their thoughts and experiences in dealing with matters of ethics and ethical conduct. The first article in this series, "Some Ethical Aspects of International Satellite Remote Sensing," by Ronald J. Wasowski," appears in this issue while additional articles on ethics and ethical conduct will appear in forthcoming issues of *PE&RS*. These articles will bring to the members of the Society a vast spectrum of thinking for their serious review and consideration. The Professional Conduct Committee welcomes comments and additional expressions of concern and help.

—A.O. Quinn, P.E., L.S., Certified Photogrammetrist
Chairman, Professional Conduct Committee
D'Aloquin-Quaker Mt.
Wilmingon, NY 12997

New ASPRS Membership Benefit

By special arrangement with GIS World, Inc., members of the American Society for Photogrammetry & Remote Sensing may now subscribe to *GIS WORLD* for only \$36 (62% off the regular subscription rate of \$96).

How can you find out what GIS is all about? By reading the only magazine in the world published by and for GIS professionals. Every issue is brimming with information on who's doing what with GIS, how to use it, where to see it, how to buy it, expert analysis of issues, and a lot more.

ASPRS members who subscribe to *GIS World* also qualify for exclusive subscriber discounts to other GIS World publications, including the new 1990 *GIS Sourcebook*.

 Yes! I want *GIS WORLD* at the special ASPRS rate of US \$36 (offer good worldwide).

Mail or FAX (301-493-0208) this coupon to ASPRS, 5410 Grosvenor Lane, Suite 210, Bethesda, MD 20814-2160, or call ASPRS at 301-493-0290, to subscribe.

Name: _____ Phone: _____

Address: _____

City: _____ St/Prov: _____ Country: _____ ZIP/Mail Code: _____

Check Enclosed; Purchase Order Enclosed

Charge to: Visa; MasterCard Acct # _____ Exp. date _____