

resolution is improved, it may be necessary to give more attention to the resolution of the film employed.

In conclusion, I should like to give you some figures which I hope will serve to emphasize what the use of high altitude mapping photography can mean in the way of time and costs. Let us assume that we wish to compile topographic maps at a scale of 1:250,000 with a contour interval of 100 feet for those parts of the United States not now adequately covered for such a requirement. There are at present some 1,200,000 sq. mi. of this country in such a category. It should be noted first that no additional horizontal control work would be needed for such a requirement, and only a very small amount of additional vertical control work would be required. Next let us assume that we are able to secure mapping photography from a flight height of 45,000 feet, and, it should be noted, this is entirely within the realm of the possible. To secure this photography would require some twelve airplanes and crews for a period of about two years. Using this photography, a mapping organization of some 200 people built around 100 units of Multiplex mapping equipment could complete all field and office work up to the "ready-for-drafting" stage in approximately two years. The total cost of the mapping up to this same stage would be in the order of \$2.75 per square mile, a third of this being the cost of the photography. Thus this hypothetical mapping requirement could be completed to the drafting stage in a total elapsed time of three or four years and at a cost of about 3½ million dollars. The resulting product would not be a reconnaissance map, unless you consider that a map is such by virtue of its scale alone. On the contrary, the resulting map would be a standard product, made to prescribed standards of accuracy and content, the high altitude photographic materials having been "engineered" with proper consideration for the other factors involved in order to produce the desired result.

## THE INTERNATIONAL SOCIETY OF PHOTOGRAMMETRY\*

*Captain O. S. Reading, President*

**I**T IS a pleasure to talk to you for about five minutes about the International Society because I know there are many members in the American Society who could profit greatly by a better acquaintance with the work of our colleagues abroad. I myself, in spite of considerable attention to such matters, could profit with more attention still.

I think that any of you would realize that we have a great deal to gain from a close study and exchange of information with our colleagues abroad, if you would stop to examine the buildings and the equipment of the Wild factory at Heerbrugg, Switzerland, the theodolites and levels, the A-5 and A-6 photogrammetric mapping instruments, and the wonderful photographs made with the new normal-angle lens and glass plate camera; or the work of the Institut Geographique National in France with the Poivilliers SOM equipment; or the ingenious instruments of Santoni and Nistri in Italy; or the wet mosaics and horizontal cameras and measurements of Finland; or the economic map or photo-map of Sweden; or the large-scale surveys and revision techniques in Great Britain; or, closer at home, the activities of Mr. Field and Dr. Howlett in Canada and the Royal Canadian Air Force at Rock Cliff, and Dr. Trorey's talk on reconnaissance yesterday.

\* A talk given at the Sixteenth Annual Meeting of the Society, Washington, D. C., January 13, 1950.

In the early years of the Society, a number of us made a very strong effort to get translations of the leading papers in photogrammetry, that were written in other languages. We corresponded with nearly everyone we could think of, asking for these translations, but the output was very low. It seemed that the very men who were most competent to make the translations of photogrammetric material were also extremely busy with their own activities.

In 1939, *Photogrammetria*, the quarterly journal of the International Society, was started. Unfortunately, before it could get much momentum, the war intervened and choked it off. It resumed publication in 1949, and I think it is very deserving of our support, for in this way we are assured of accurate, valuable summaries of all important photogrammetric papers in all languages except, perhaps, those behind the iron curtain.

I know that in return the Europeans would appreciate articles on our techniques. I think that the discussion this morning on high-altitude photography might well be of great interest to them, and they would like to have it written especially for their magazine. We have many other papers that would be of value to them as well as to our own work.

I think that quite a number of you have intended to subscribe to *Photogrammetria* but perhaps you may have been so busy that you have put it off. Hence, to make it easy for you to subscribe at this meeting, Mr. Norcross has arranged for his secretary to take your subscription. You can pay the \$4.00 now or later, as you wish, but if you will leave your name and address, we will see that your subscription is forwarded to the publisher in The Netherlands.

The technical commissions of the International Society are getting under way once more. The commission members of most of the national societies have been appointed. For our Society, they are James J. Deeg for Commission I, Photography and Aerial Navigation; John Pennington for Commission II, Plotting Instruments and Techniques; Robert Altenhofen for Commission III, Aerial Triangulation and Geometric Computation; Talbert Abrams for Commission IV, Mapping and Commercial Applications; John V. Sharp, Commission V, Miscellaneous Applications; and George Harding, Commission VI, Education, Terminology and Bibliography.

Commission I has the very difficult task of getting an international lens test that can be readily and accurately duplicated in all national laboratories and will not cost too much for special new equipment, and at the same time will be delicate enough to reveal any significant differences in lens performance. As you can appreciate from the remarks of Mr. Katz, Dr. Howlett, and of Mr. Sharp later, this is going to be an extensive job, but with the enthusiasm photogrammetrists have, I believe it can be done.

In Commission VI, the Austrians have already started a multilanguage dictionary that contains some four thousand terms. They are contemplating the use of about ten languages, including Russian.

The conditions in Europe are such that it is rather difficult to obtain a valid comparison between their many fine instruments and techniques. Each country seems to stick to its own system, but in our country some commercial and governmental organizations have several of these instruments working side by side in adjacent rooms; and I am sure that the resulting scientific records and data will be of very great interest to the next International Congress of Photogrammetry, which is to be held about the middle of September in 1952. The American Society is to be host to this Congress and I am sure from the success of the meetings of the American Society the last few years, we are going to have the largest and most interesting Congress that has ever been held.