aerial photogrammetry in cadastral surveying.

The committee recommended the use of the polar coordinate method for locating details in cadastral surveying, in preference to the rectangular coordinate or offset method. This is doubtless entirely in agreement with present practice in this country, for surely with the adoption of more modern methods of cadastral surveying American engineers are using the polar coordinate method very extensively. Both its advantages in most cases and its occasional limitations are familiar to all American surveyors.

However, the discussions of the methods for measuring distances are noteworthy. It is rather astounding to an American surveyor to find that in continental Europe the use of tapes for measuring distances in cadastral surveys is virtually superseded by the double-image tacheometer. Delegates at the congress agreed that the improved double-image tacheometers now manufactured in Europe were capable of measuring distances up to 140 meters with an accuracy of one part in 5,000, the modern tacheometers even being equipped with ingenious devices for reading directly horizontal instead of inclined distances. The committee recommended the extensive use of this instrument in cadastral surveys. Inasmuch as the method is at present seldom used in the country, this recommendation indeed deserves the attention of American surveyors.

Although it is understood that aerial photogrammetry is entirely inadequate under some circumstances in cadastral surveying, the discussion by the committee indicated their complete accord regarding the adaptability of the method in many cases. They recommended the method for use in cadastral surveying extensively but not exclusively. On account of the skepticism still existing among American surveyors regarding the resources of aerial photogrammetry, there is considerable significance in this recommendation, for it must be remembered that cadastral surveying is rather a severe test for the precision of the method and that this recommendation is made by a committee consisting largely of European engineers who are familiar with the use of the stereoscopic plotting instruments for photographic mapping.

These, then, are briefly the conclusions reached by the congress of the International Federation of Surveyors regarding what were considered as the two most outstanding topics in the field of improvements in the instruments and methods of surveying.

* The above is a reprint from "Science", November 23, 1934.

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FEDERALLY OWNED NEGATIVES AND THE PRIVATE CONTRACTOR

by

G. W. Kneisly

"There is one matter which is of rather prime importance to the commercial field in photographic mapping - the question of ownership and availability of negatives owned by the United States Government.

I know that you appreciate the excessive cost of selling aerial surveys to various individuals and industries. It frequently develops that in making calls and solicitations, we learn that an individual is interested in a certain area which we know is covered, but that the negatives are not of the quality or the scale that the customer should use. In these instances, it would frequently be possible to secure orders for new work if we were in a position to show the owner a picture of his property. Certain Governmental units have advised that the photographs were available only on requisition from the office of a Cabinet Member. If we, who have done a lot of work in selling the desire, tell the client that he might secure certain pictures now in existence if he has sufficient influence, there is a tendency for him to attempt to secure all of his pictures without reference to the commercial end. Frequently he ends up disappointed in the value of photographs for mapping work because he got something for nothing which was not what he should have had. As a result, instead of having an enthusiastic booster for our industry we have a dissatisfied, disgruntled client.

I fully realize that it is not the policy of the Governmental Departments to in any way furnish business to commercial firms. However, I do feel that the professional individual who has spent a great deal of time and money in keeping abreast of what has been done, and where the records are available, should be able to charge for this professional knowledge.

I feel that it would be most proper for this Society to recommend to Governmental Departments that members of the Society should be allowed to have access to existing films to be used for whatever purposes they might desire, provided that they always furnished the Department loaning them the films, a proper guarantee of the safe return within a specified time. This is a matter which should be passed on, particularly by the War Department with respect to information in the hands of the National Guard Photo Squadrons.

I am thoroughly convinced that the development of mosaics and line maps therefrom at scale of about 1:12,000 would be of very material value to each and every county unit in this country. In a great many instances, photographs are in existence covering counties which have not, in any way, been used by the local authorities, nor has the value of same been brought to their attention. Any individual who develops a desire in the local people to have this mosaic constructed should be protected insofar as use of the existing negatives is concerned.

At the present time, I have a tentative inquiry from an individual for a photographic survey of ----- acres of timberland in the ----- ------. I know that photographs covering that area are in existence. I also know that the last information from the Engineer's Office controlling those photographs and films was to the effect that they were not available for general use or distribution. The area is not great enough to justify sending a photographic crew down to do the work when consideration is given to

the interest which the client has in the project. He would probably pay between $150 and $200 for the record on this property or about one and one-half cents per acre. Our firm could be busy, we could be helping the industry, and our client would receive something of material value if the films were available to us.

* Extract from a letter

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NEWS NOTES

Lieutenant O. S. Reading and Mr. Leon T. Eliel are attending the International Congress of Photogrammetric Societies in Paris during November. We are hoping that they will give us some interesting discussions of the meeting in a later issue of News Notes.

Fairchild Aerial Surveys, Inc. of New York were recently awarded a contract covering 5,000 square miles in South Carolina for the Geological Survey, and Fairchild Aerial Surveys, Inc. of Los Angeles were awarded a contract covering 22,000 square miles in New Mexico and Arizona for the Soil Erosion Service.

The recent report of the Board of Surveys and Maps augurs well for the future of Photogrammetry. It is hoped that copies of this report can be furnished to all members of the Society at a later date.

The Soil Erosion Service recently had the experience of receiving only a single bid at quite a high price on a fair-sized aerial survey. Conditions certainly must be changing!

It is rumored that Hans Gruner, Colonel C. H. Birdseye and Earl Church have been determining sequential elevations of the falling stratisphere balloon of Captain Stevens by means of mathematical analysis from a series of aerial photographic obliques.

The wooden model of a rectifying machine for transformed nine-lens photographs is taking shape over in the office of Lieutenant Reading in the Coast and Geodetic Survey. On casual inspection it looks as though the full scale machine will rival the Stereoplanigraph in size and apparent complexity.
