

KEY ADDRESS*

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I THANK you, Mr. Chairman, and the members of the American Society of Photogrammetry and the American Congress on Surveying and Mapping for this opportunity to appear before you and to talk to you. After seeing the imposing mechanical contrivances in the exhibit room, I realize there would be little point in trying to make a show of my knowledge of photogrammetry; so I hope you won't mind if I just chat about this and that and leave the technical details of your professional activities in your own good hands.

I was a little puzzled that what you called a keynote speech was scheduled at this period of your meeting; but that was before I learned that two closely related organizations are holding consecutive meetings this week, covering the field of photogrammetry first and surveying and mapping next. I feel that the timing was real strategy; that it was specifically designed to get you coming and going.

As a matter of fact I am not quite sure where photogrammetry stops and surveying and mapping starts. I suspect however that at least one reason for your consecutive meetings is the close relationship, in the modern concept, of the surveyor's transit and the aerial camera. I am familiar with both because I started my professional career as a mineral surveyor in Eastern Oregon many years ago, and during the last few years I have visited several of the Geological Survey field offices where I explored the mysteries of the Multiplex, the Twinplex, and a number of the larger more complicated and, I suspect, costlier stereoplotting machines.

The development achieved in this field during the past twenty years is indeed impressive as evidenced by the remarkable exhibits displayed in connection with your meetings. I know, too, that thousands of new and modern maps and charts have been produced since the War. In spite of this progress, however, the thoughtful engineer, scientist, conservationist or economist must recognize the stark fact that we do not have adequate basic data to meet the needs of our rapidly expanding economy.

I started out as a mining engineer; and as my working life has been spent largely in the mining field, I know you will pardon a tendency to slant my comments in that direction. I make no apologies for doing so, because I truly feel that much serious thought must be focused on the terrific drain now being made on our mineral resources, a drain that will increase rather than diminish because it is part of the payment we must make for progress.

It is gratifying to me to know that serious thought *is* being devoted to the matter of anticipating and meeting the Nation's needs for mineral supplies. On October 26, 1953, President Eisenhower named a Special Advisory Committee on Minerals Policy to study this very problem. The assignment was brief, but not simple. The Committee was asked:

1. To make sure there was available mineral raw materials to meet any contingency during the uncertain years ahead.
2. To make sure we can meet the ever-growing mineral requirements of an expanding economy.
3. To recommend policies related to the mining industry and our economic strength.

* Consecutive Annual Meetings of The American Society of Photogrammetry and The American Congress on Surveying and Mapping, in Washington, D. C., on March 9, 1955.

The Committee, consisting of the Secretaries of Interior, State, and Commerce, and the Director of the Office of Defense Mobilization, submitted its report last November. This report carried eleven specific recommendations, of which I shall read only the sixth because it is one which particularly concerns the interests of this group. Here it is: "That the Department of the Interior, the Federal agency with major responsibilities in this field, accelerate those *activities which must precede* or supplement private exploration such as topographic and geologic mapping, geologic research and the development of geochemical and geophysical theories and techniques."

In copying this recommendation, I have underscored the clause, "activities which must precede," because aerial photography and topographic mapping are such activities.

In the mining industry, maps are needed, first as guide maps to find one's way around, next to scout out promising features in prospecting, then to work with and to record findings, and finally for development and construction, and the selection of routes for the necessary transportation facilities. The same is true in all other activities involving studies of the terrain—the locating of highways, the building of dams for reservoirs, the digging of ditches for irrigation, and the selection of sites for industry. The extensive pipe line construction now being so vigorously pushed by the oil and gas industry, gives a fine example of the need for general map coverage for preliminary planning, to be followed by more detailed surveys for final location.

A few months after establishing the Committee on Minerals Policy, the President established an Advisory Committee on Water Resources Policy. That committee was directed to explore all aspects of Federal policies and programs in the field of water resources, and to recommend courses of action that will best solve the tremendous water problems that now exist throughout much of this nation. The President asked the Secretary of Interior to serve as chairman of this committee, with the Secretaries of Defense and Agriculture as full members. The Secretaries of Commerce, of Health, Education and Welfare, and the Director of the Bureau of the Budget were asked to participate on an ad hoc basis. At the same time the President approved an Inter-Agency Agreement on Coordination of Water and Related Land Resources Activities which established the Inter-Agency Committee on Water Resources.

Section 4(a) of the Inter-Agency Agreement approved by the President referred to the "collection and interpretation of basic data" and stated that continuing procedures would be established to coordinate agency activities in this work. Now "basic data" is a term designed to include all the fundamental information and statistics needed before a proper study can be made of an area or subject. It includes topographic maps and aerial photography because these are just as essential in river-basin studies as they are in geologic and mineral investigations.

Closely related to the work of the Inter-Agency Committee on Water Resources are the provisions of the Hope-Aiken Bill authorizing the small-water-shed program. This program is to be directed by the Secretary of Agriculture, but the law carries specific instructions that the facilities of other Departments be used. Again the need for basic data, including adequate maps, is recognized. However, there probably will be difficulties in scheduling all related work until the basic data activities that should precede development are expanded sufficiently that they really can get ahead.

If I may move outside the field of natural resources for a moment, I would mention the problem of an adequate highway system for the nation. There, too,

the President has called for extensive studies and the subject has been very much in the news during the last two months. Any program of extensive new highway development will be of interest to this group in much the same way as will be the activities in mineral and water resources development. All clearly emphasize the need for good general map coverage, to be supplemented by more detailed surveys geared directly to design and construction work.

Still outside of the Interior Department, I might mention the extensive activities of the Department of Defense that directly or indirectly impinge on the work you assembled here are interested in. The world-wide mapping and charting programs that I understand are now being carried on for military purposes would have staggered one's imagination a decade or two ago, I imagine.

In the Interior Department, we are primarily interested in natural resources development and conservation. Long ago that gave rise to the need for the Department to launch a topographic mapping program. We have traditionally tried to draw together all related needs for such maps so that the advantages and economies of making a uniform series of topographic maps could be realized.

I understand that many of the people engaged in surveying and mapping work in Interior have long been actually associated with the two organizations assembled here. I trust that the contributions our people have made have been significant. I imagine the benefits the Department has derived from the work of these organizations has been real and extensive. I strongly endorse the work of technical organizations in general. I hope the Interior Department can long continue to be associated with the work your two organizations are doing.

NEWS NOTES

PORTABLE PROCESSING AND PRINTING KIT

The Navy Bureau of Aeronautics has awarded to Gordon Enterprises a research and development contract for a portable 70 mm. film processing and printing kit.

The highly compact kit will contain all necessary equipment for contact printing, including contact printer, developing trays, sensitized photographic printing paper, chemicals, and carrying case.

Features include a cold-light illumination source, a built-in self-timer, and a unique arrangement permitting convenience in cutting conventional-sized paper down to 70 mm. size. The printer utilizes readily replaceable components to facilitate repair or replacement.

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