pected to save the Department enough money to pay for the annual cost of operating the Aerial Surveying and Mapping Unit.

Although we have actually just begun using photogrammetric methods in our highway work, the past and present achievements of our unit as well as the large number of its potential applications have thoroughly convinced us that it warrants a permanent place in our organization.

## 1948 FIELD OPERATIONS OF AERO SERVICE CORPORATION\*

Virgil Kauffman, President, Aero Service Corporation

LAST year, your semiannual meeting, which was the first in a number of years, was held in Philadelphia, and quite a number of you folks here today attended and saw the normal operations of a company engaged in commercial photogrammetry.

At that period, we were able to show you in fair detail the number of things we conduct within our plant. Since then, we have had to go out for some of the more involved and sketchy and risky portions of the work we do, that is, our air operations.

In addition to our air operations, we also have ground operations, but since I am privileged to tell you about some of these operations, I am leaving out our groundwork in the field, that is, our field engineering surveys, and I am leaving out the operations of the photogrammetric work within the United States.

Last year we completed our thirtieth year of operation. It is a rather old company operating aircraft. It put us at our highest pressure, because we had operations extending from the northern portion of Canada to South Africa. In all cases we had to equip expeditions for sometimes severe winter work, where temperatures ran as much as 40° below, with very delicate instruments. We had to equip operations to go across the Atlantic and frequently to fly into and across Africa and to engage in operations there, ten or twelve thousand miles from the base and source of supplies.

With the aid of our staff, moving picture cameras are carried along to give us some sort of a report of the conditions encountered. The film covers a sequence of flight operations of three particular jobs, one being in Canada in wintertime, the second, operations in the Far North and the vicinity of the Arctic Circle in summer, and the third one in Africa, which is in operation at the present time.

I will endeavor to explain these moving pictures as we go along. First, I want to tell you that all of them are in connection with airplane photometric work; the film ties in very closely with photogrammetry, because, first, we must have proper base information on which to place the on-the-ground information and lock it together; it involves cameras, both in covering terrain for the preparation of base maps, and for determination of the exact positions of the aircraft after the work is flown.

I might say this, that these pictures are not altogether scientific. Our men work hard, and they play hard. They get mixed up with a lot of geography, and some work includes a lot of it, but I think the film will give you an idea of what these men go through in their routine schedule of work for the Aero Service.

<sup>\*</sup> Introduction to a color film shown at Annual Meeting of the American Society of Photogrammetry, Washington, D. C., January 14, 1949.