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CENTRES FOR TRAINING IN PHOTOGRAMMETRY AIRBORNE GEOPHYSICAL AND OTHER SURVEYS

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1. Basic Considerations

In establishing training centres three basic factors must be considered.

Firstly, the entire range of the syllabus should be considered, bearing in mind all the applications that could be made of this new and rapidly expanding Science of Aerial Surveys. The fields covered by Aerial Surveys are beginning to dovetail into every branch of economic development. There can be no doubt, therefore, as to the need for personnel trained in the entire range as well as for personnel trained in specialised branches of this science.

Next, we should consider ensuring a constant and adequate student body in each field that would justify the expenditure required to provide the building and the equipment, to pay the professors as well as to keep the costly instruments in constant use. In this regard consideration would have to be given to the manner of the choice of

scholars to attend the courses as well as to the manner of payments for these courses.

If payments for students' courses would be done entirely by the ECA then we could expect that a given number of students would attend each year. Even then we would have to take into consideration instances like that explained in the paper of the Government of Northern Rhodesia in which it is stated that "This Territory's needs in teams of trained personnel are likely to be small. Photogrammetry is specialised work and the Survey Department is likely to require an establishment for only two or three trained photogrammetrists among its technical staff plus perhaps one or two professional officers to be trained for supervisory roles." In cases such as these the countries no doubt would have to be considering the burden of finding jobs for a number of trained photogrammetrists thrust upon them by a quota of free ECA scholarships.

As it is quite likely however that each Government would have to provide most, if not all, of the financial expenses of the students, or have the students bear their own expenses, the primary consideration in regard to the expected number of students from each country would have to rest upon their ability to find a regular occupation in that field. This therefore would have to depend upon the number of existing and planned projects utilising various aspects of Aerial Surveys in a particular country. Undoubtedly every country needs aerial surveys all the time but the degree of use of aerial surveys by these countries would have to depend to a great extent on the prejudices surrounding the need to provide adequate data in cartographic and tabular forms prior to development. Many people would not, for the world, give up the adventure and charm of the old hit-and-miss methods. Worst of all is the attitude of some surveyors towards aerial surveys which is reminiscent of the manual workers' objections to automation.

It is therefore evident that a considerable preliminary education on the applicability of Aerial Surveys should be given. I devoted a considerable portion of the paper to the First U.N. Regional Cartographic Conference for Africa (E/CN.14/CART-43/81 and 81 Add 1).

Meanwhile considerations regarding the expected number of students from each country would have to be determined by the existing application that is being made of aerial surveys. Countries that are already thoroughly mapped and explored would undoubtedly require less use photogrammetry and hence fewer photogrammetrists trained at the centre than would other countries that still require considerable mapping and explorations.

In Centres located in countries providing greater employment opportunities in aerial surveys a considerable portion of the student body would be made up of students who pay their own tuition. Even though students, from countries with employment opportunities, would still find their way wherever the centres are located the number would be considerably reduced due to the increased burdens on the student.

Because of these considerations it is my opinion that the principal criterion for determining the location of the centre should rest on the guarantees made concerning employment opportunities for the graduates of the center.

The third point to be considered in establishing Centres of training in Aerial Surveys is, the ability of the host government to pay its quota for the establishment and maintenance, as well as the likelihood that this government with such means at its disposal would always be willing to continue its quota of the operational costs.

Some countries desiring the site of the centre are no doubt thinking in terms of the prestige it would bring to their country. Some are even casting a glance on boosting their already booming tourist trade, even though a training centre does not offer the same prospects for this purpose as would a headquarters of foreign conferences.

It is my opinion that, by and large, the host country would be able to continue providing its quota principally because of the number of its students that would be attending the courses. This again would bring us back to the second consideration as being the paramount one.

It would certainly be unfair to countries, requiring a limited number of scholars, to be deprived of the results of their modest quotas because of the development of an indifferent attitude on the part of the host country, which should then be responsible for majority of the operational costs, thereby resulting in an inadequate faculty or obsolescence of the equipment for the laboratory.

As a training center cannot be compared with projects that are costs - liquidating and profit making, it can be hardly expected that the tuition collected would be able to cover even the operational overhead, even without any consideration of the initial and recurring capital investments. Undoubtedly, however, some percentage of the costs would have to be borne by the tuition paid by the students. As this percentage will be greater or less in proportion to the attendance, the status quo explained in the second consideration again claims pre-eminence.

2. Location of the Centre

While the consideration regarding the sites for the centres would be based on the request of the host countries, it is nevertheless quite necessary that before any final decision can be made the ECA should first make a thorough investigation along the lines I have enunciated. It is not surprising that the result of such an investigation would reveal a country, which has not volunteered as host, as having a higher potential for the site than a volunteer country; in which case a request would have to be made to that government to accept the responsibility of being the host of the training centre.