

in most cases in order to determine the accuracy of instruments. There are several slightly different definitions for it. We use the one of them which is based on the theory of mean error: "The c-factor is defined as the ratio of flight height to contour interval" (Photogr. Eng. 1951 p. 371). The contour interval is in this case 3,33 times the mean error of height (Photogr. Eng. 1951 p. 359). When using the c-factor it is necessary to know previously the mean error of height in order to get the contour interval 3,33 times this error. But if we know this error we know also the accuracy of instrument, which should be afterwards derived also from the c-factor. The information given by the c-factor must be known before. That seems to be somewhat unsatisfactory. We would obtain a proof by a detour which could be obtained much better directly. The critics of the c-factor probably had this fact in mind. But in practice the c-factor seems to be used seldom in this direct manner for evaluating the accuracy of a plotting machine, it is used normally for relatively comparing their accuracy from experience, it is a mean to which one is accustomed and in this respect it is without doubt useful at least for practice.

But in other respect the c-factor is quite valuable as we have seen. It gives an essential and useful relation between the terrain and the photogrammetric contour lines. Especially we in Europe take into account in most cases the instruments and the special techniques of photogrammetry, but we tend to neglect a little the visible results of our photogrammetric work. In this respect the c-factor seems to be of positive value also for us. It is useful determining an appropriate contour interval for a given flight height and a known accuracy of instrument, the latter given by the c-factor or by the methods used in Europe.

**"THE ACCURACY OF PHOTOGRAMMETRIC CONTOUR-LINES  
AND THE AMERICAN C-FACTOR"**

par

**Prof. Dr. R. Finsterwalder.**

Un plan de courbes de niveau est examiné. Les résultats démontrent que l'équidistance doit être 6 fois autant que l'erreur moyenne de hauteur pour les levés de carte à la manière intensive et 3,3 fois autant pour les levés de carte à la manière extensive. Au dernier cas la hauteur de vol divisée par l'équidistance des courbes de niveau est équivalente au facteur C qui est employé en Amérique. Le profit du facteur C est discuté brièvement.

**DISCUSSION ON PROF. FINSTERWALDER'S PAPER,  
"THE ACCURACY OF CONTOUR LINES AND  
THE AMERICAN C-FACTOR"**

by

**Robert E. Altenhofen.**

It is gratifying to note that Prof. Finsterwalder's paper draws the conclusion that the C-factor has the practical value of determining the contour interval for a given flight height and stereoplotting instrument accuracy. There has been much adverse comment on this oversimplified artifice for denoting the performance of plotters in the production of topographic maps. So, it is refreshing