Denote by $_i\bar{y}$ the mean of the $_im$ units which happen to be sampled in the ith stratum. (c) Estimate the population total by $\hat{Y} = \Sigma^L_{i=1} {}_iM_i\bar{y}'$ where $_i\bar{y}' = {}_i\bar{y}$ if $_im > 0$ and $_i\bar{y}' = 0$ if $_im = 0$. The approximate variance formula for this estimator can be found in the literature. Here a new approach is used to derive these formulas. This method, which uses the ratio estimator $_i\hat{Y}$ of the strata mean $_i\bar{Y}$ can be generalized to cover post stratification in any sampling design however complex. The result is as follows: Let $\hat{Y}({}_iy_i)$ denote the estimate of the total for the particular sampling scheme which has been used and $V({}_iy_i)$ denote its variance. Then the estimate of the population total is $\Sigma^L_{i=1} {}_iM_i\hat{y}$ and its variance is $V({}_iy_i')$ where $_iy_i' = {}_iy_i - {}_i\bar{Y}$ if $_iy_i$ is in the ith stratum.

This approach permits consideration of different systems of post stratification with regard to precision. (Received April 20, 1956).

NEWS AND NOTICES

Readers are invited to submit to the Secretary of the Institute news items of interest

Personal Items

The Degree of Doctor of Laws was conferred on Harold Hotelling by the University of Chicago on 11 November, 1955, at the convocation in celebration of the twenty-fifth anniversary of the University's Social Science Research Building. Dr. Hotelling was cited as the "foremost contemporary contributor of quantitative methods to the social sciences, who by mathematical analysis has notably advanced our understanding of fundamental problems in economics and in statistics."

George E. Auman has been appointed Assistant Chief of the National Bureau of Standards Management Planning Division, where he will assist in Bureau's management program.

Paul M. Blunk has left Operations Research Group, Convair, Fort Worth, Texas, to become Chief, Reliability Group, Aerojet General Corp., Sacramento, Calif. He will apply principles of probability and mathematical statistics to the field of rocket reliability.

Derrill J. Bordelon received an M.A. in Mathematics from the University of Maryland, February 1, 1956.

William Fuller Brown, Jr., formerly of the Physical Laboratory of the Sun Oil Company, Newtown Square, Pa., has accepted a position as a Senior Physicist in the Central Research Department of Minnesota Mining and Manufacturing Company, St. Paul, Minnesota.

Jack Chassan has accepted the position of Chief Statistician at Saint Elizabeth's Hospital in Washington, D. C.

Dr. Willard H. Clatworthy has accepted a position as Staff Statistician with Westinghouse Electric Corporation, Atomic Power Division, Bettis Plant, Pittsburgh 30, Pa.

Mr. John L. Dalke has been appointed chief of the High Frequency Imped-