## OBITUARY



RICHARD FINSTERWALDER—1899-1963

In the evening of 28 October 1963 Professor Dr.-Ing. Richard Finsterwalder died after a severe heart attack. He was buried at the Westfriedhof in Munich at the side of his father, Geheimrat Professor Dr. Sebastian Finsterwalder. It was thanks to that great scientist who had coached his son in so many of his own interests, that the foundations were laid for the brilliant career of Richard.

At first he chose constructional engineering as his profession, and in 1922 he received his diploma at the Technische Hochschule in Munich. His duties led him to work on roads and rivers in the Bavarian uplands. There his inherited love of the mountains established itself, and he developed an interest in the surveying methods with which his name will always be connected—terrestrial stereophotogrammetry. About this time he also had to go to the Austrian highlands to make certain surveys. This was the starting-point of accurate cartography in the high mountains, and the laying of the foundation for this work over the whole world. It was the success of his efforts which decided him to make geodesy his life's main work. The methods he devised were extended to hitherto unmapped glaciers in Asia. Thus in 1928 Finsterwalder joined the German–Russian Alay–Pamir expedition as geodesist and glaciologist. Among the expedition's discoveries was Lednik Fedchenko which he found to be 72 km. long—the largest glacier then known outside the Polar regions. His previous experience with his father in the Alps had stood him in good stead, and he there developed the calculation of glacier speed by photogrammetry which today is still considered the most reliable method.

After his return from this expedition, at the end of 1928, Finsterwalder married Maria Alzheimer. They had two sons and one daughter, Barbara (now Frau Lippert). The elder son, Peter, died in 1955 in a motor accident. The younger son, Rupert, is a doctor of medicine in Munich.

In 1932 Finsterwalder accepted the post of assistant to Professor Gast in the Department of Surveying at the Technische Hochschule in Hanover, and worked there as *Privatdozent*. On the death of Professor Gast in 1942 Finsterwalder succeeded to his post with the title of Professor.

Finsterwalder took part in another expedition to the high mountains of Asia in 1934, the German Nanga Parbat expedition, as chief scientist and in charge of geodesy, topography and glaciology. On this occasion, by means of his photogrammetrical process, he discovered a new form of glacier flow which he called *Block-Schollen* movement. This was described in detail by him in this *Journal* (Vol. 1, No. 7, 1950, p. 385). In 1939 Finsterwalder published his instructional book *Photogrammetrie* which had its second edition in 1952. Just before his death he was working on its third edition. Former colleagues of Finsterwalder hope to complete the work and publish it in 1965.

While in Hanover Finsterwalder spent much time in working out a scheme for making accurate measurements of mountain heights, and overcoming the difficulties which had previously been experienced. After the War he busied himself reconstructing the organization of surveying throughout Germany, but soon his native Munich invited him to return to occupy the chair of Photogrammetry, Topography and General Cartography at the Technische Hochschule. So in 1948 he brought his family back to the house which had belonged to his father, and which he had left eighteen years before. At the same time he became joint editor of the Zeitschrift für Vermessungswesen. In 1950 he joined a small group of scientists who had revived the Gesellschaft für Photogrammetrie.

On his return to within easy reach of alpine regions he again devoted much of his energy to mountain photography, and with this, during his glacier observations, he combined climatology, meteorology, geophysics and rheology. His glaciological researches were recognized by his election as President of the Commission on Snow and Ice of the International Union of Geodesy and Geophysics at its meeting in Toronto in 1957.

As President of the Committee of Management of Expédition Glaciologique Internationale au Groenland (E.G.I.G.) he was in charge of the most important phase of its researches on the Greenland Ice Sheet in 1959.

Finsterwalder was the author of seven important books and innumerable articles in scientific journals. He had been a member of the Glaciological Society for many years and gave it very active support. His charming personality made it a pleasure to meet him and discuss glaciological and other matters, which the writer was able to do on several occasions.

It will be seen from this much abridged account of his widespread interests and tireless activities what an extremely valuable contribution to glaciology and many other sciences Finsterwalder made during his lifetime, and what a deep debt is owed to him.

G. SELIGMAN