

Asaph Grammar School and University College of Wales, Swansea, where he gained an honours degree in geography. All his life he had been a keen mountaineer besides being a Queen's Scout with much experience of camping and travelling. In 1961 he seized the opportunity to join his University expedition to Arctic Norway where his chief interest lay in the raised beaches and moraines. At the University he undertook additional courses to fit him for survey work in the Antarctic and finally joined the British Antarctic Survey as a topographical surveyor in 1963.

His evident qualities of leadership and his great good humour made him a popular member both on board ship and at his base. At the time of his death he was already in his second Antarctic year and would have returned in 1966 with an extensive coverage of the mountains at present being mapped. Unfortunately it is feared that most of this work was lost with him. Before leaving for the Antarctic he had presented a joint paper, with F. Solari, to the Photogrammetric Society entitled "Plane Table Photogrammetry with a Leica Camera in the Punjab Himalayas".

Dr. John Wilson, son of Dr. and Mrs. G. I. Wilson, was just twenty-nine. Born at Stafford he was educated at Bedales School and The Queen's College, Oxford, where he took his B.A. degree in animal physiology in 1959. The next three years were spent studying at Middlesex

Hospital Medical School where he gained the degree of B.M., B.Ch.

Having qualified he successively held posts at Mount Vernon Hospital, Northwood, Middlesex Hospital and the Ipswich and East Suffolk Hospital.

In 1964 he volunteered for service in the Antarctic with the British Antarctic Survey. The next 5 months were spent at the Department of Human Physiology of the Medical Research Council, developing the research project he was to carry out at Halley Bay. This was chiefly concerned with variations in manual dexterity and sensitivity of touch in varying degrees of cold.

In December 1964 he sailed for Halley Bay, the most southerly of the British bases, where a ship can only pay a visit once a year. At the base he immediately became a popular and active member enthusiastically taking part in the general work besides following up his own research. Indeed, he became so keen that he applied to stay on for a second year, an application which was immediately accepted.

All these three men who were so tragically lost in their tractor were enthusiasts in their field and at the outset of careers which promised so well for the future. All young men who go to face the Antarctic require unusual strength of character, enthusiasm and dedication; these three excelled in them all.

V. E. FUCHS

G. DE Q. ROBIN

NEWS and VIEWS

Theoretical Astronomy in the University of Sussex

THE Science Research Council is to make a grant of up to £33,500 to enable the University of Sussex to establish a research group in theoretical astronomy. The group will be led by Prof. W. H. McCrea, at present professor of mathematics in the University of London, Royal Holloway College. The group will form part of a joint programme of teaching and research by the University of Sussex and the Royal Greenwich Observatory at Herstmonceux. In this connexion, the University has made the following appointments: *Visiting Professor*, Sir Richard van der Riet Woolley; *Visiting Readers*, Dr. D. Lynden-Bell and Dr. B. E. J. Pagel. The University is to make an appointment to a further chair in theoretical astronomy.

Biochemistry in the University of Liverpool:

Prof. J. Glover

DR. J. GLOVER, Leverhulme reader in biochemistry in the University of Liverpool, has been appointed to the newly established second chair of biochemistry in the University. Dr. Glover is forty-six years old, and was educated at the Royal Belfast Academical Institution and The Queen's University, Belfast, where he gained a first degree in chemistry in 1940 and a master's degree in 1941. During 1941-45 he served as an experimental officer in the Chemical Inspection Department of the Ministry of Supply, and was in charge of the analytical laboratories at Chorley and later at Woolwich Arsenal. During 1945-47 he held the Musgrave research studentship and a senior research grant from the Government of Northern Ireland at the University of Liverpool, where he undertook research on vitamin A. He was awarded a Ph.D. in 1948 and a D.Sc. in 1961 by the University of Liverpool. In 1947 he was appointed assistant lecturer in biochemistry at the University of Liverpool and was promoted lecturer in 1951, Leverhulme lecturer in 1955, Leverhulme senior lecturer in 1958 and reader in 1964. In 1950 he was appointed a Commonwealth Fund Fellow and worked at Washington University, St. Louis, and Columbia University, New York. Dr. Glover has lectured in Switzerland,

Washington, and New Jersey, and in Stockholm, and has attended many international conferences in the United States and in various countries in Europe. He is a member of the committee of the Biochemical Society.

Improved Research Reactors

THE *Pluto* research reactor at Harwell is now running at 20 MW—twice the power for which it was designed. The reactor has been running at 15 MW since 1962, when the first improved fuel elements were used; a new type of fuel element was recently introduced and the reactor operated, in a series of experimental runs, at 22.5 MW. Parallel tests are being conducted in the 'Materials Testing Reactor' (a *Pluto*-type reactor) at Dounreay. The reactor is now using the new type of fuel element and will be operating at increased power early in 1966. The basic reason for increasing the power of these reactors is to increase the neutron density in them and thus to enable research workers from the Atomic Energy Authority to increase the number of experiments carried out on them each year. The new fuel element largely responsible for the increase in power consists of four concentric fuel tubes instead of the ten-plate assembly previously used. It was developed by engineers at Harwell and Dounreay in conjunction with the Production Engineering Research Association and Marston Excelsior, Ltd. The Harwell work also included the addition of four vertical quick-acting control rods within the fuel element and this form of control will be used in both *Pluto* and the Dounreay 'Materials Testing Reactor'. It is believed that these improvements could be adapted to any of the existing reactors of similar type, namely, *Dido* at Harwell, *Hifar* in Australia, *DR3* in Denmark, and *FRJ-2* at Jülich, Germany.

French Satellites in Orbit

ON November 26 the French satellite, *A-1*, was successfully launched from Hammaguir in the Sahara by a three-stage *Diamant* rocket. France thus became the third nation to launch a satellite unaided. The *Diamant*