

NEWS and VIEWS

The Russian Artificial Planet

THE final stage of a Russian multi-stage rocket, launched at about 17.00 hr. U.T. on January 2, flew past the Moon to become the first artificial planet of the Sun. The final-stage rocket is stated to have weighed 1,472 kgm. (3,245 lb.) after all its fuel was burnt, and its pay-load of scientific instruments, together with the container, weighed 361.3 kgm. (797 lb.). The instruments were intended to measure the Moon's magnetic field, the intensity and composition of cosmic rays, lunar radioactivity, the impact of meteors and the composition of the Moon's atmosphere. The rocket was also equipped with radio transmitters operating on some or all of the frequencies 183.6, 19.997, 19.995, 19.993, 71.2 and 212 Mc./s. The programme of scientific measurements is stated to have been successfully accomplished before radio contact was lost on January 5.

The rocket left the Earth with a speed of 7 miles/sec., and when it was about 75,000 miles out, at 00.57 hr. U.T. on January 3, it emitted a cloud of sodium vapour which was observed from the Earth as a glow in the constellation of Virgo. By 10.00 hr. U.T. on January 3 the rocket was 130,000 miles from the Earth's surface, at longitude 40° W. and latitude 8° S. The rocket passed the Moon, at a distance of 4,700 miles from its surface, at 02.59 hr. U.T. on January 4 and was then moving at a speed of 1.5 miles/sec. away from the Earth. Since the Moon was near last quarter at the time of the launching, the rocket's path was nearly tangential to the Earth's orbit; the rocket's orbit around the Sun, therefore, has almost the same perihelion distance as the Earth's orbit, though the aphelion distance is greater because of the rocket's greater speed at perihelion. Its orbit is inclined at only a small angle to the plane of the ecliptic and the distance from the Sun is expected to vary between a minimum of 91 million miles and a maximum of 122 million miles. The period of revolution will be about 450 days, with the first perihelion on about January 14.

New Year Honours

THE following names of scientists and others associated with scientific work appear in the New Year Honours list:

Baronet: Kenneth W. M. Pickthorn, during 1935-50 member of Parliament for the University of Cambridge, for political and public services.

C.H.: Sir John Beazley, emeritus professor of classical archaeology, University of Oxford, for services to scholarship.

Knights: Prof. Alexander W. G. Ewing, director of the Department of Education of the Deaf, University of Manchester; Stuart Gillett, lately chairman of the Tanganyika Agricultural Corporation; Henry R. F. Harrod, University lecturer in economics, University of Oxford; Dr. Reginald P. Linstead, rector of the Imperial College of Science and Technology, University of London; Dr. Douglas W. Logan, principal of the University of London; Kelvin T. Spencer, chief scientist, Ministry of Power; Prof. Arthur P. Thomson, professor of therapeutics and

dean of the Medical School, University of Birmingham.

K.B.E.: Albert E. Axon, chancellor of the University of Queensland, for public services; George W. H. Gardner, director of the Royal Aircraft Establishment, Farnborough (Ministry of Supply); Prof. Marcus L. E. Oliphant, director of the School of Research in Physical Sciences, National University, Canberra; Geoffrey S. Peren, principal of Massey Agricultural College, New Zealand; Sir George Wilson, chairman of governors, West of Scotland Agricultural College.

C.B.: Air Commodore R. H. E. Emson, director of air armament research and development, Ministry of Supply; W. B. Littler, director-general (scientific research (munitions)), Ministry of Supply; J. W. Stork, director of studies, Britannia Royal Naval College, Dartmouth; A. A. Part, under-secretary, Ministry of Education.

C.M.G.: T. H. Searls, lately director, Universities and Adult Education Department, British Council; Prof. H. C. Webster, professor of physics, University of Queensland, for services to the Federal Government of Australia.

C.B.E.: Dr. Muriel E. Bell (Mrs. Hefford), nutritionist to the Department of Health and supervisor of Nutrition Research, Department of Medical Research Council, New Zealand; M. M. Burns, director of Canterbury Agricultural College, Christchurch, New Zealand; W. A. S. Butement, chief scientist, Department of Supply, Australia; Dr. M. Cook, chairman of the Metals Division, Imperial Chemical Industries, Ltd.; I. J. Cunningham, superintendent of the Animal Research Station, Wallaceville, New Zealand; Dr. I. de Burgh Daly, lately director of the Institute of Animal Physiology, Babraham, Cambridge (Agricultural Research Council); Capt. N. Fawcett, H.M. chief inspector of explosives, Home Office; P. T. Fletcher, deputy managing director, Industrial Group Headquarters, Atomic Energy Authority, Risley; T. A. Lang, associate commissioner, Snowy Mountains Hydro-Electric Authority, Australia; A. B. Lilley, medical director of the Cancer Council, New South Wales; S. C. Longhurst, lately a member of the Forestry Commission; R. A. Lovell, chief mechanical engineer, Ministry of Transport and Civil Aviation; Prof. W. T. J. Morgan, professor of biochemistry, University of London, and member of the Biological Research Advisory Board, Ministry of Supply; Dr. H. J. Plenderleith, keeper in the British Museum; Dr. E. E. Pochin, director of the Department of Clinical Research, University College Hospital Medical School (Medical Research Council); J. A. Ratcliffe, chairman of the Radar and Signals Advisory Board, Ministry of Supply Scientific Advisory Council, reader in physics, University of Cambridge; R. H. Schlotel, director of engine research and development, Ministry of Supply; R. B. Tennent, director of agriculture, New Zealand; Dr. H. W. Thompson, lecturer in chemistry, University of Oxford, senior regional scientific adviser for civil defence, Southern Region; Prof. S. J. Watson, professor of agriculture and rural economy, University of Edinburgh.