

direct touch with him; and it was not, indeed, until the Second World War that I came again into even closer scientific and personal contact with him, and then mostly 'behind the scenes'.

When the university memberships were abolished, Sir John Anderson, having no real interest in party politics, retired from parliamentary life until he entered the House of Lords. He became chairman for his remaining years of the Port of London Authority; and he continued to give practical evidence of his interest in scientific matters, not only as a director of Imperial Chemical Industries, Ltd., but also through

a variety of honorary services to science, such as those of chairman of the Parliamentary and Scientific Committee, treasurer of the Lister Institute and president of the Research Defence Society. Nobody who was privileged to work closely with him could have failed, I think, to become aware that, behind the mask of his almost legendary reserve and quiet assumption of authority, Lord Waverley retained a generous and even emotional attachment to science and its claims, though an open display of such an enthusiasm was scarcely within his range.

H. H. DALE

## NEWS and VIEWS

### SCEPTRE III

FOLLOWING the article by Allen, Allibone *et al.* in *Nature* of January 25, p. 222, we publish a photograph of SCEPTRE III. The photograph shows part of the 4-ton strip steel core threading the torus. Each half of the core has an eight-turn winding carrying 50 amp. d.c. to provide flux biasing. The primary, consisting of eight separate windings of eight turns each, is wound as uniformly as possible over the surface of the torus. The torus has a bore of 12 in. and is made of  $\frac{1}{2}$ -in. thick aluminium in four quadrants, or sectors, separated by four straight sections each 6 in. long, which provide viewing and pumping facilities. The eight insulating gaps are protected by eight pairs of interlaced copper liners, and double vacuum gaskets made from indium wire are used throughout. Quartz-covered slits—one in the vertical plane and one horizontal—allow the discharge to be viewed by a high-speed rotating mirror camera. The primary windings are arranged to obscure these slits as little as possible. The toroidal magnetic field is created by providing a d.c. supply to 102 layer-wound coils placed around the torus perimeter beneath the primary winding, and at pumping and viewing ports the field is maintained constant by compensating coils. At the maximum  $B_z$  field of 1,000 gauss some 125 kW. are dissipated, and since these coils are not water-cooled the time of operation of the apparatus is limited by the temperature rise of these coils. The capacitors can be discharged into SCEPTRE III 40 times a minute, and about 100,000 discharges have been produced without noticeable deterioration of the torus lining. The terminating-circuit of the radio-frequency pre-ionizing supply is seen mounted above the core, and the water-cooling feed lines and a lead chamber containing the nuclear detectors are on the right.

### Dr. J. R. Killian, jun.

As special assistant for science and technology to the President of the United States, Dr. James Killian brings to that post, specially created for him last November, a good deal of scientific and administrative experience. The position was described by President Eisenhower, in his address on "Science and National Security" on November 7, as one in which the incumbent, "aided by a staff of scientists and a strong advisory group of outstanding experts . . .", would "have the active responsibility of helping me

