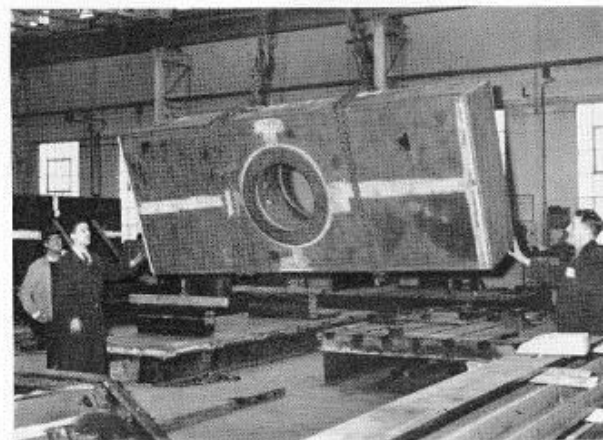
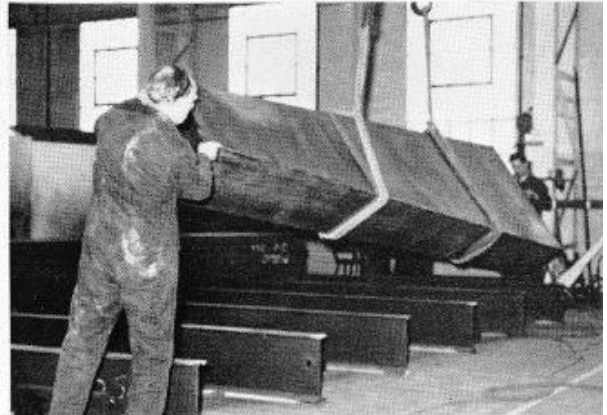
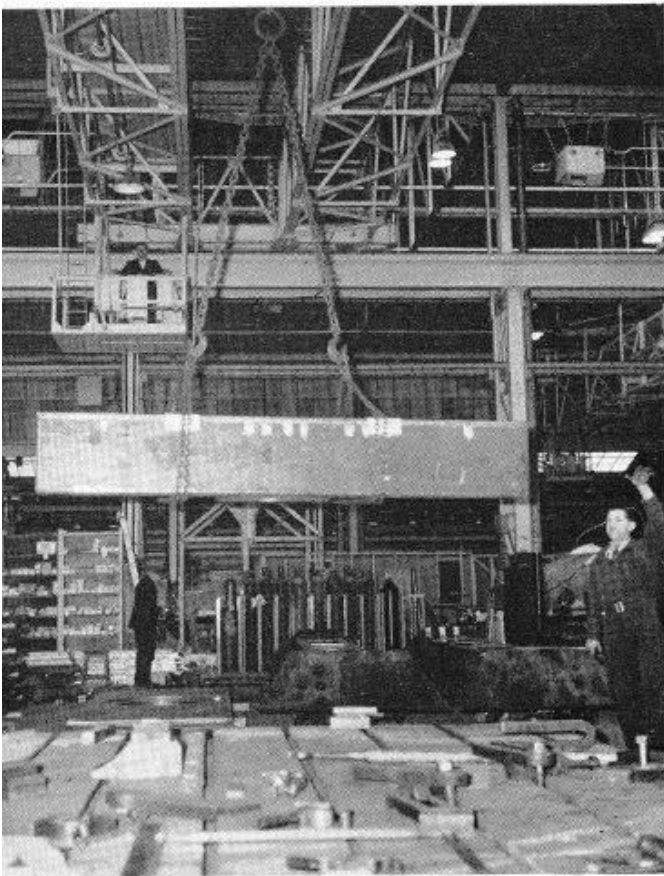


Aerial mountings being built at Crompton works

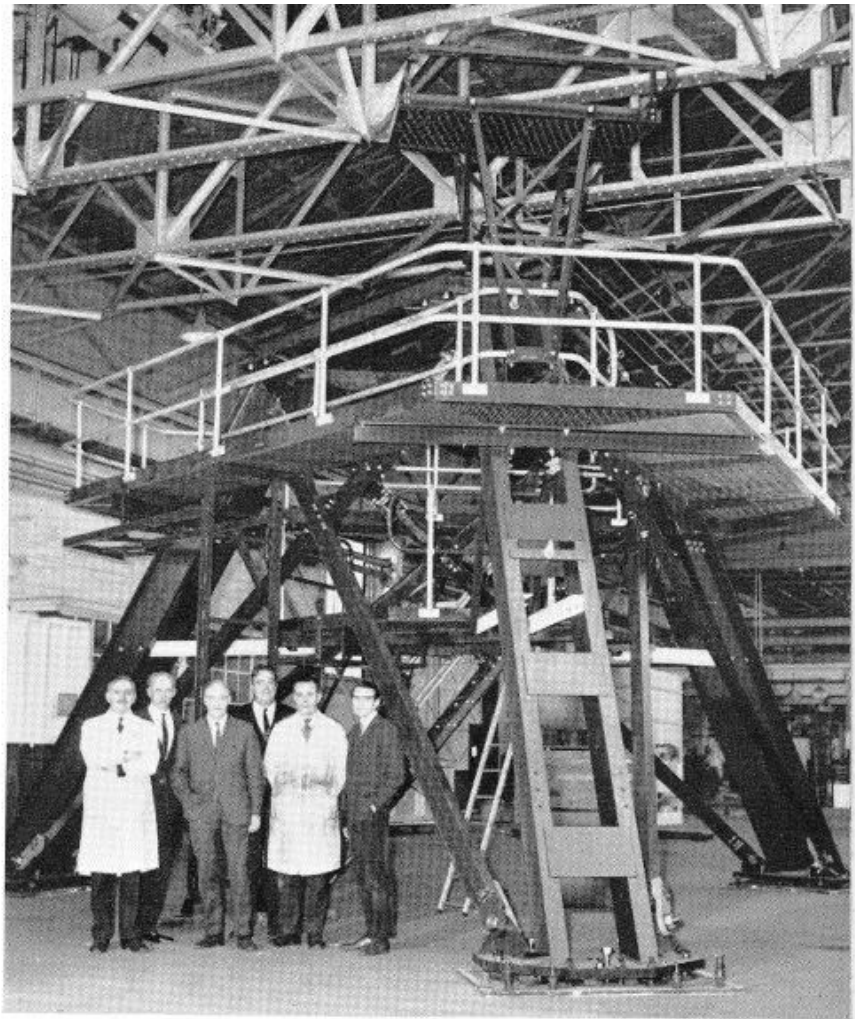
A GREAT deal of the fabrication area at Crompton Works is now being used for the construction of mountings—gantries and U frames—for radar heightfinder aerials. This work is being done here to relieve the heavy load on Gateshead: it demands a tremendous amount of floor space to lay out the pieces for the separate sections and to set up the jigs for welding them. Using the Crompton Works has enabled us to speed up the job and get it done.

The Project engineer who is supervising the work in liaison with Frabrication Division is Gillie Lowe from Gateshead. During its opening phase he has spent almost as much time at Chelmsford as he has at Gateshead. Now the first gantry has been com-

pleted and others are being run off at regular intervals. The pictures show the aspects of the job and how all the heavy metal work is swung from one section of the shop to another by travelling crane. The U frame base alone weighs four tons, and its aerial supporting arms are one and a half tons each. The sheets for the base come to size, cut at the mills, and the holes for the neck are machined at Harvey's, so that all the fabrication work is done by welding. The speed of handling and the long seams and joints make the welders' arc time higher on this work than on most. When each unit is finished it is put in an oven and heated to 650°C. to relieve any stress in the metal.



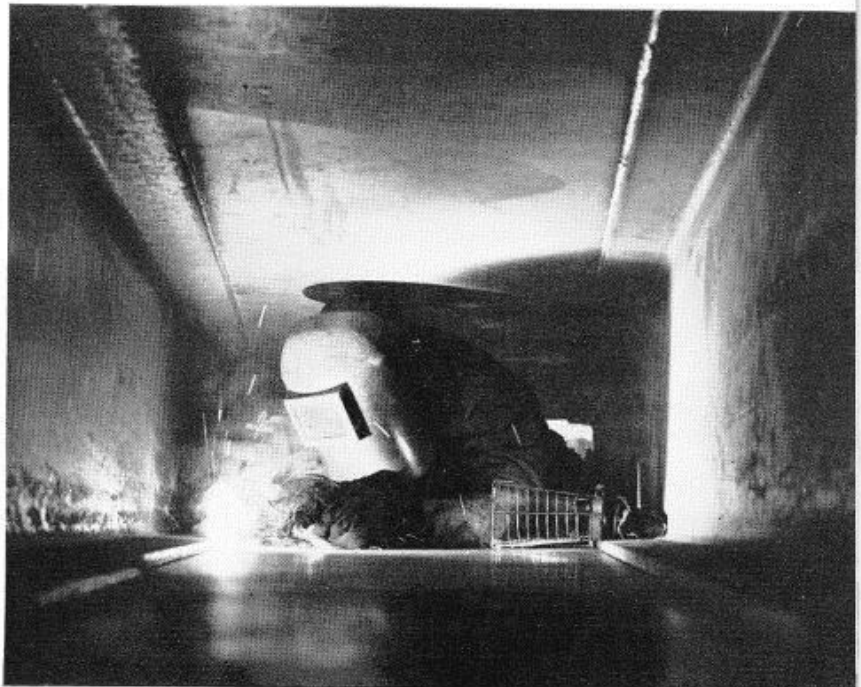
RIGHT: The first gantry for a NADGE heightfinder aerial to be built at the Marconi-Crompton Works. A number of these are in production there now together with U frame aerial supports. Left to right: Bernard Jones of Quality Control, Fabrication Division; Cliff Poulton, Production Engineer; Gillie Lowe, Production Engineer, Gateshead; Alf Valance, Production Engineer; Henry Raven, Foreman, Fabrication Shop, Crompton Works; and Walter Roberts, Project Co-ordinator, Fabrication Division



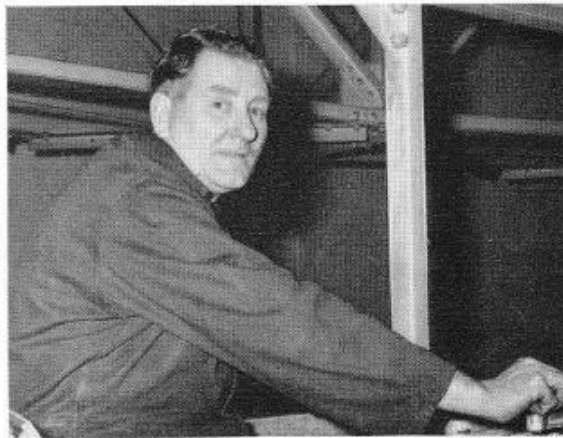
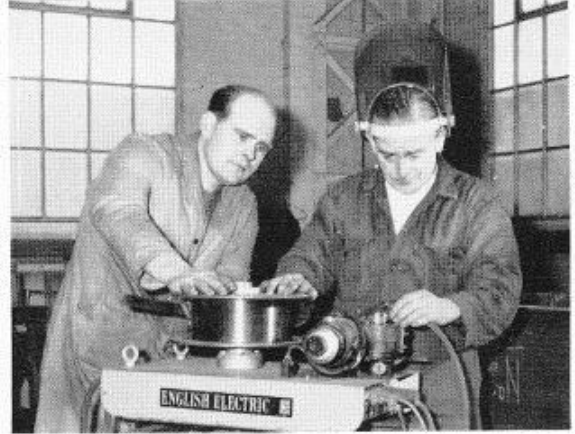
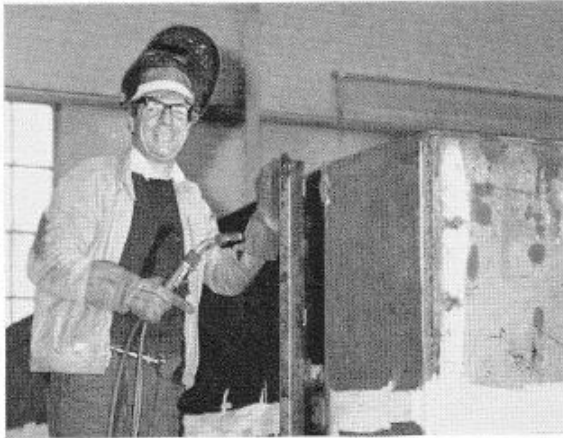
FAR LEFT: The Fabrication Shop at Crompton Works with a U frame aerial support base being lowered on to a welding jig by the travelling crane

LEFT TOP: A 20 ft. U frame arm being made. The sheets have been 'tacked' together and the shell is being put into position for the internal seams to be welded and the stiffeners inserted. Handling the arm here are Don Page and Tom Tyson

BOTTOM LEFT: A completed U frame base being moved to a special jig in which the arms are welded to it. Seven miles of 1.2 mm. welding wire are used on each of these structures. Left to right: Danny Lumsden, John Page and Tom Tyson



RIGHT: The shape of things to come? This is Ted Wales welding the seams inside one of the U frame arms. He works his way right down the length of the arm to the narrow opening while his colleague pays out the life-line and ultimately hauls him back. An extractor fan draws away the fumes



TOP LEFT: The arm of a U frame set up in the jig with the base. Danny Lumsden is ready to weld the joint

gun where it melts into the joint. Ted served thirty-two years at Crompton's

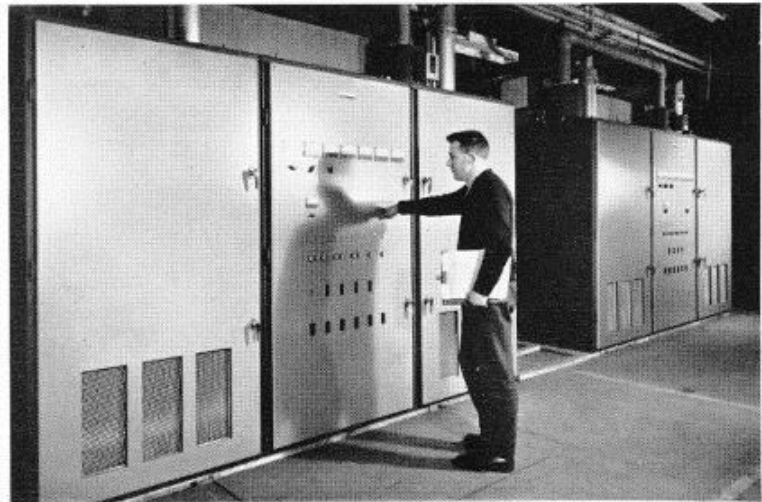
TOP RIGHT: Len Bazley and Ted Wales setting up the welder. The welding wire, or metal filler, is fed automatically to the

ABOVE LEFT: There are two travelling cranes which span the shop floor. Tom Tyson drives one of them and, ABOVE, RIGHT: Geoff Roberts drives the other

Marconi transmitters for B.B.C. London colour programmes

Two u.h.f. television transmitting systems are being installed by Marconi to put B.B.C.1 on the air in colour and also to improve the reception of B.B.C.2.

Two of the 40 kW. television transmitters with their associated sound transmitters are seen here on test at Chelmsford. The back cover shows the combining unit set up in High Power Test at New Street before being sent to the B.B.C.'s station at Crystal Palace. The two pairs of transmitters will be capable of feeding 80 kW. on each programme to a single aerial and will provide both B.B.C.1 and B.B.C.2 colour signals for London

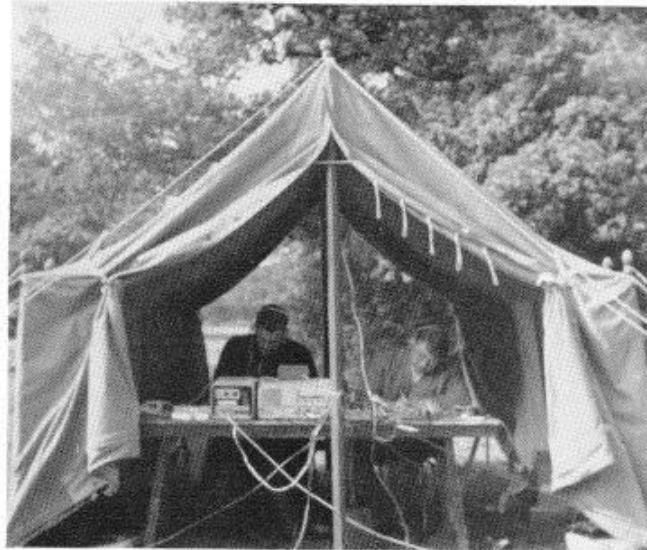


National Field Day '69

ONCE AGAIN members of the Chelmsford Amateur Radio Society spent a hot but peaceful week-end in the wilds of Danbury Park, near Chelmsford, when they took part in the Radio Society of Great Britain's National Field Day.

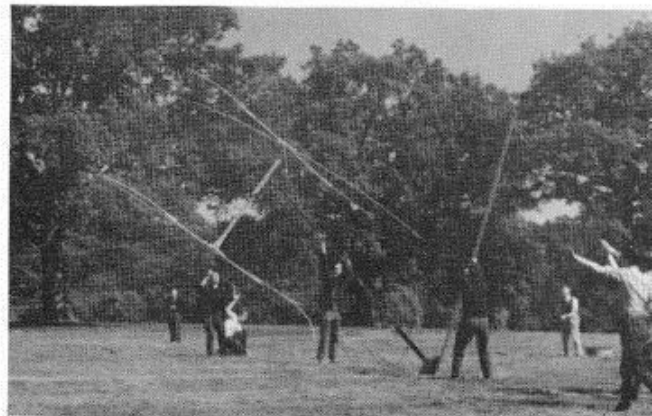
The members, many of whom being Marconi people and apprentices, pitched their tents on the soft meadowland pastures beneath the elms and oaks and, with the dipoles gently swaying in the breeze and the generator setting the rhythmical beat, they were on the air non-stop for twenty-four hours. Running ten watts to a 'home brew' single-element quad aerial 30 ft. high they contacted four VKs (Aussies), which really put them on the map.

In all they notched up 249 contacts breaking all previous Society records for a single-station entry, and now anxiously await the results.

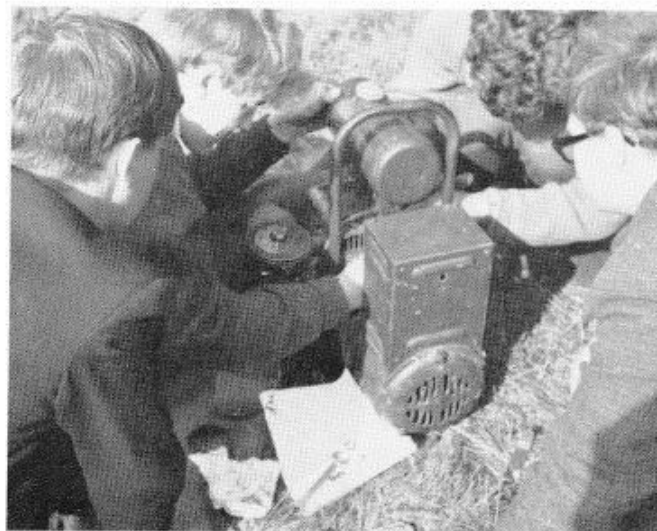


TOP RIGHT: Over 240 stations were contacted during the week-end, including four Australians, using a modified KW2000A transceiver with a 2E26 in the P/A. Operating here is Arthur Butcher, G3KPJ, left, and logging is Tom Carter, G3VCF

CENTRE: Disaster struck when the 17 ft. square quad aerial came crashing to the ground, but members quickly salvaged some of the bits and built a modified one in the form of a single element



BOTTOM: 'Anyone know anything about generators?' was the plea during most of N.F.D. Luckily Willie McClintock, G3VPK of Applied Physics Group, Baddow, had lent his portable one as a stand-by so no power was lost. Here Paddy Maris, Witham, left, and Don Beattie, Billericay, calm the beast which broke down, before attempting to pull the string again



Beehive Lane First-Aiders

RECENTLY the Company held another First Aid Course at New Street, consisting of eight Tuesday morning lectures of three hours each. Personnel from all the different departments were selected to attend and the course culminated in an exam for the St. John Initial First Aid Certificate. Successful candidates from Beehive Lane were Mrs. Joan Fearnley, Mrs. Rosemarie Miller, Mrs. Maureen Cotton and Malcom Millan—a 100 per cent result from Beehive Lane.

Another course will be held in September, in the evenings. Details will be published later.