

Nimrod Project Committee

Progress of Plant Construction.

Injector Room

The D.C. gun with the H.T. and vacuum systems are in the hands of the Scientific section and experimental work is in progress.

For the Linear Accelerator the cooling equipment has been erected and the wiring is now in progress so that commissioning should start within the next fortnight.

The Linear Accelerator Vessel has been ground and cleaned on the inside and is now in the final stages of the vacuum testing. The roughing pumps and line have been installed and are being used for this testing in conjunction with a temporary diffusion pump. When the testing is finished, the work of installing the final diffusion pumps will proceed as they become available.

Preparations have been made to receive the R.F. Liner for the Linear Accelerator regarding which strenuous efforts are now being made to ensure delivery during April.

The R.F. Drive Chain has been installed and erection has commenced on the feed lines to the Linear Accelerator, the installation of the modulator is also nearing completion.

Installation and wiring of the Control Panels in the Injector Room is still proceeding, those associated with the D.C. gun and Accelerator Column are about to be placed in their final position. This will permit the building of the screen walls around the panels to form a local control room.

This building work together with other small outstanding items of a similar nature are programmed to be completed during April so that the whole of the Injector Room can then be made into a clean area to permit further experimental work to proceed.

Magnets

On the erection of the nine sector Model VI, the coils have been installed together with the water cooling equipment and is now ready for the installation of pole pieces and for putting into operation by the Scientific and Experimental Section.

264 magnet sectors have been taken into the Magnet Room and placed on the sole plates. The final positions of rather more than half of these are known and they are being placed in these positions as far as possible in conjunction with the marking of datum points and the fitting of build up plates to the sectors in order to reduce as far as practicable the amount of movement which will have to be carried out when all the sectors have been received in about 1 month's time.

Surveys so far carried out in the Magnet Room have indicated that the Monolith is very susceptible to temperature gradients across it. The permanent air conditioning equipment has therefore been put into operation as early as possible with temporary thermostatic control and a further survey has just been carried out under stable temperature conditions the results of which are awaited to assist in determining the permanent system of control. The installation of the general services in the Magnet Room is now practically complete and the installation of the Magnet supply cables is in progress.

Experimental Area

The installation of the testing rig for the main vacuum vessels has commenced in the South West section of this area.

The remainder of the Experimental Area is to be used for storage of equipment. Racks have been provided for the storage of the Magnet Coils and the first Coils have just been delivered to site. Space has been allocated for some of the power supply equipment being provided by the English Electric Co. and the first items of this equipment have been received.

Power Supply Equipment

Discussions have taken place with the erection departments of both Brown Boveri and the English Electric Co. and arrangements made to accept materials on site.

It is expected that the Converter Room will be sufficiently advanced for Brown Boveri to start erection in about one month while the English Electric Co. start work in the Alternator House Annexe in July followed by the installation of the main machines as soon as the foundation block is ready at the beginning of November.

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