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Issued: DEC 20 1949

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ELECTRONICS SECTIONGroup 10

One Induction Heater, HE-1, Serial 1, was completed and is in use by Group 34.

The following are under construction for Scioto Laboratory:

1. One Underwater Electrometer (Electronics portion 95 per cent complete).
2. Ten alpha monitors have been constructed and are under test.
3. Three, Model PS-12, Power Supplies for Quartz Fiber Microbalances, (EO-589), 25 per cent complete.
4. Three wiring harnesses for Quartz Fiber Microbalances, (EO-610), 15 per cent complete.

The following are under construction for Mound Laboratory:

1. Three, Model HE-1-A, Induction Heaters, (EO-582, 588, and 602), 35 per cent complete.
2. Ten alpha monitors, complete and under test.
3. Five, Model PS-12, Power Supplies for Quartz Fiber Microbalances, (EO-589), 25 per cent complete.
4. One wiring harness for a Quartz Fiber Microbalance, 15 per cent complete.
5. Tuning Box for RF Electrodeless Discharge Unit, (EO-388), 75 per cent complete.

Group 11

The Logac-L which is located in E-105 has had the new breech assembled, was cleaned up and painted, and is now ready for calibration. The instrument is needed in the cross check study of the alpha counting instruments.

Construction was completed on the high voltage power supply for the mass spectrograph. Final testing of the supply awaits completion of the source with which it will be used.

Design work on the metal evaporation equipment is completed and detailed drawings are being prepared. The prints should be available for construction in the Machine Shop within a few days.

Tests were run on two models of preset timers for possible units to convert manually-operated scaling units to automatic. The two were not sufficiently reliable for precise counting work, and we are awaiting the arrival of another model for further investigation.

With the present trend of the counting load in E-107 pointing to more beta and less alpha samples, some counting instruments are being modified so that more beta counters will be available for use.

A Micromax pH recorder was modified from a range of 0-4 to 2-12 for Group 53. A conductivity alarm, used in conjunction with this pH meter, was also modified so that the alarm rings when the solution resistance is 9000 ohms or less rather than 1000 ohms or less.

Group 12

The two-way Jackson intercommunication system connecting Corridor T-280 to Low Risk Area T-279, and Corridor T-278 to Low Risk Area T-279 has been installed.

Work is nearly completed on the Jackson two-way intercommunication system linking T-279 to T-71.

The remaining junction boxes and selenium rectifiers have been installed in T-267. The potential controller modifications are completed in

T-267. Additional junction boxes which will make it possible to complete the modifications in T-270 have been ordered from Group 10.

Stock items and emergency stand-by equipment in T-37 have been rearranged to economize on space and to provide room for completion of emergency stock.

Normal routine maintenance on all electronic equipment in the "T" Area was carried out as usual.

Group 14

The counting load this period included 6774 counts on samples. A second Bradley counter has been checked extensively and put into use for routine counting of beta samples.

JWH:PEO/rca