

8/20/77
by J. RiedelPresent Status & Immediate plans1. The hi Q model.

The parts are on hand and by Sept 1 everything should be assembled and ready for tests.

2. 10 watt transmitters. D Birket has built the three 10 watt transmitters ~~and~~ which produce 12 watts output into 100 ohms when driven by a .3 volt rms input over the range 15 to 60 MHz.3. Phase shifters. Three of the 4 phase shifters in the Quad phase shifter module work, and that is all we need.4. Phase detectors. The unity ~~mod~~ NIM modules are coming by pony express from California. Maybe they will arrive by Sept 11.5. Amplitude Servoes. W Herder has the diagrams and will construct the first unit to be done by Sept 6.6. Enquiries for more information have been made to Kinas, and when this info comes in, program "TUBE" will be activated and the detailed performance capability of the HCW100000E will be calculated, hopefully completed in ~~December~~ September. Then the driver can be designed.

~~Sturim~~

7. Specs. During the next month, specifications for the big power supply and for the synthesizer will be written.

8. Galling tester

The last details of the galling tester are being done, and hopefully within a month this tester will begin testing the moving fingers on various surfaces. At the present time, the following should be tested:

- a. silver contacts on Cu (mechanically polished)
- b. " " " " (electro polished)
- c. " " " " (mech + electro polish)
- d. " " + Rhodium on each of the 3 above.
- e. " " + gold + Rhodium on b & c above.

9. Electropolishing

D. Cole is undertaking a program to develop repeatable methods of electropolishing Cu. He will measure the starting & sliding coefficient of friction on sample surfaces using rhodium plated silver contacts as the slider.

10. Directional Coupler

S. Frances will invent a cheap all purpose directional coupler. He will also learn everything about the circuits D. Birbet has been responsible for, and henceforth be responsible for them.

11. Current tester

The current tester was used to eddy current heat the ~~Fe~~ cathode of Mallorys ion source when it was replaced by iron. The cherry red color indicated a probable temperature of 700°C .

The limitation on further power input to it (estimated at 50 watts) was the 2KV 300ma power supply substituted for the scrooged power supply of the Heath Kit so called 1KW CB transmitter. To be able to continue these tests, and also to have a supply to test the ~~trans~~ final transmitter drivers it would be very desirable to acquire a 3KV 1Amp supply and W. H. H. is doing so.