Note on Target Radial Positioning Servo

<u>Purpose</u>: Movement of the target radial position to a requested position between two machine pulses.

System : It consists of (see Fig.)

- a) Splitfield DC driving motor (with bigger torque than those have now)
- b) Reduction gear (smaller reduction than now)
- c) Generator (producing a feed back voltage for speed controlled servo)
- d) Amplifier (DC-amplifier with 1000 mA/V gain)
- e) Potentiometer (for setting to the requested position)
- f) Potentiometer (on gear shaft as now for position indication)

The system will be made mechanically in such a way that it can be mounted on the ordinary target units just by replacing the normal unit of motor, gear and potentiometer.

Leads to M.C.R.: Unfortunately, there has to be five more than now, that is just twice the number used now.

Electrical equipment: There has to be a new driving unit with several potentiometers e). It will be made in such a way that it can be connected to the new programming unit which is under construction. It will be possible as well to use it for manual drive just by setting the potentiometer e) to the requested position.

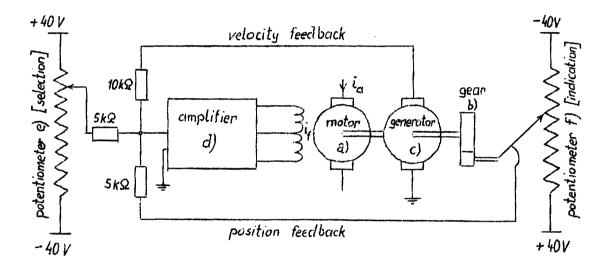
Some predetermined data :

Maximum speed of target rod : 20 cm/sec.

Time for change up to 10 cm : less than 1 sec.

Accuracy of rest position : error less than .5 mm.

<u>Time scale</u>: The earliest date for coming into operation for one target seems to be 1.3.1961. If there is special request during the following month, it may be 3 weeks before.



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