

PROGRAMMES TO USE WITH THE MAGNETICS

by

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The following programmes are described in this note.

R.A.E. 134. Clear drum.

R.A.E. 135. Write up clock track.

R.A.E. 136. Read to drum.

R.A.E. 144. Synchronise and enter programme.

R.A.E. 145, Part II. Punch out drum in synchronism.

R.A.E. 160. Re-synchronise drum.

A brief note is given of the object of these programmes followed by their specification sheets.

R.A.E. 134. Clear Drum.

This is run in at the beginning of the programme immediately after the initial card. Zeros are written on every track of the drum. This is done when programme testing because R.A.E. 145 punches out non-zero tracks only; clearing the drum prevents it from punching previous users' data. When in production it is still advisable to use it in case inconsistent results are being obtained in several runs of the same programme: it is helpful to know that the condition of the machine when starting the programme was exactly the same in each run.

R.A.E. 135. Write Clock Track.

This writes a programme on to track 15/15. If this is brought down from the drum, placed in D.L. 1 and entered in any minor cycle, within three major cycles D.L.1 is cleared and the programme ends on 0, 0-0, 0, 0 X in 10. It is used by R.A.E. 144 and 145.

R.A.E. 136. Read to Drum.

A triad of cards placed after this programme with P₁₅ and bP₁₇ + aP₂₁ punched on the top row of the first card is read on to track a/b. The triads following are read on to successive tracks until another combination is punched on the top row. In addition a P₃₁ is punched on the first row of the last track to be read; normal reading is resumed after this triad. This programme supersedes that described in paragraph 8.2 of the manual.

R.A.E. 144. Synchronise.

Placed at the end of a programme. It brings down the clock track and "synchronises" the drum - that is, it enters the clock track in order to find which is minor cycle 0 - then brings down another track into a delay line and enters it in a specified minor cycle. The numbers of the track, delay line and minor cycle are punched by the user. If the whole programme is read on to the drum, the first track will bring down other tracks to fill the delay lines and start the programme. During programme testing this is particularly useful, since it is only necessary to run in this card to re-start the programme.