

MARCONI RATE GENERATOR BOARD MODIFICATIONS

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The RGO board is Issue 3 and primarily increases the phase clocks from 1MHz to 4MHz to allow operation with the tape encoder. It also incorporates the changes found necessary to ensure that the system clock starts up with the correct phase. (This was a fault in the Marconi design and led to slow telescope slewing on start-up).

1. Check and fit, if necessary, the following components:

R3	1k
R4	1k
R5	link (i.e. 0 ohms)

2. Depending on whether the board is to be used with the OLD Marconi clock board (which provides a 1MHz based clock for phase1 and phase2 clocks) or the NEW RGO clock board (which provides a 1MHz clock and 4MHz based clock for phase1 and phase2 clocks) carry out the following component change:

- (a) For operation with the OLD Marconi clock board:

C7 should be changed to $\sim 470\text{nF}$ to give a $\sim 1.5\mu\text{sec}$ pulse (it must be less than $1.8\mu\text{sec}$)

OR

- (b) For operation with the NEW RGO clock board:

C7 should be changed to $\sim 100\text{pF}$ to give a $\sim 350\text{nsec}$ pulse (it must be less than 450nsec)

3. Remove the RTC (rise-time control) capacitors C1 to C4. These should NOT be fitted although they are shown on the Marconi circuit diagram for the RGB1880 (Fig. 7) in the blue servo electronics manual, but not on the large circuit drawing.