

DATE 12/3/59
 SH. 1 OF 2
 COMPILED BY
 TFG

TMC SPECIFICATION NO. S - 470

TITLE: DETERMINING CRYSTAL OR MO FREQUENCIES FOR THE JOB

APPROVED *[Signature]*

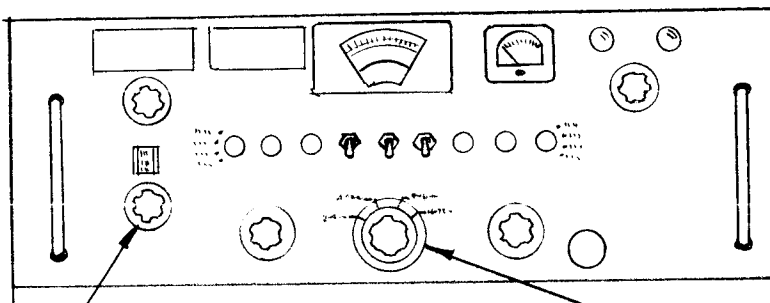
MODEL SBE-3

Page Issued

I. For Crystal or MO operation from 4.25 Mcs. - 32.25 Mcs.

$$F_{\text{xtal or mo}} = 2.000 (N) - F_{\text{output}} + .250$$

Where all frequencies are in Mcs. and F_{output} is assumed to be the position of the imaginary or actual carrier.



MODEL
SBE-3
EXCITER
UNIT
(AO-101)

<u>MODULATOR BAND</u>	<u>N</u>	<u>OUTPUT BAND</u>
4.25 - 6.25	4	4 - 8
6.25 - 8.25	5	4 - 8 & 8 - 16
8.25 - 10.25	6	8 - 16
10.25 - 12.25	7	8 - 16
12.25 - 14.25	8	8 - 16
14.25 - 16.25	9	8 - 16 & 16 - 32
16.25 - 18.25	10	16 - 32
18.25 - 20.25	11	16 - 32
20.25 - 22.25	12	16 - 32
22.25 - 24.25	13	16 - 32
24.25 - 26.25	14	16 - 32
26.25 - 28.25	15	16 - 32
28.25 - 30.25	16	16 - 32
30.25 - 32.25	17	16 - 32

Example: Suppose an output frequency of 10.5 Mcs. is desired

$$F_{\text{xtal or mo}} = 2.000 (7) - 10.500 + .250$$

$$F_{\text{xtal or mo}} = 3.750 \text{ Mcs.}$$

DATE 12/3/59
SH. 2 OF 2

TMC SPECIFICATION NO. S-470

COMPILED BY
TFG

TITLE: DETERMINING CRYSTAL OR MO FREQUENCIES FOR THE

JOB

APPROVED 

MODEL SBE-3

Page Issued

II. For Crystal or MO operation from 2 Mcs. - 4.25 Mcs.

OPERATING FREQUENCY RANGE	MODULATOR BAND	OUTPUT BAND	CRYSTAL	MO	SEE NOTE
2 - 3.73	2 - 4.25	2 - 4	Fo + 250	Fo + 250	
3.73 - 4.00	2 - 4.25	2 - 4	Fo + 250	Fo - 250	1
4.00 - 4.25	2 - 4.25	4 - 8	Fo + 250	Fo - 250	2

- NOTES:
1. Upper and lower sidebands will be reversed in the region of 3.73 Mcs. to 4.00 Mcs. when using the MO.
 2. Upper and lower sidebands will be reversed in the region of 4 Mcs. to 4.25 Mcs. when using the Crystal.

Crystal Used: CR-27/U