

Morse Oscillator

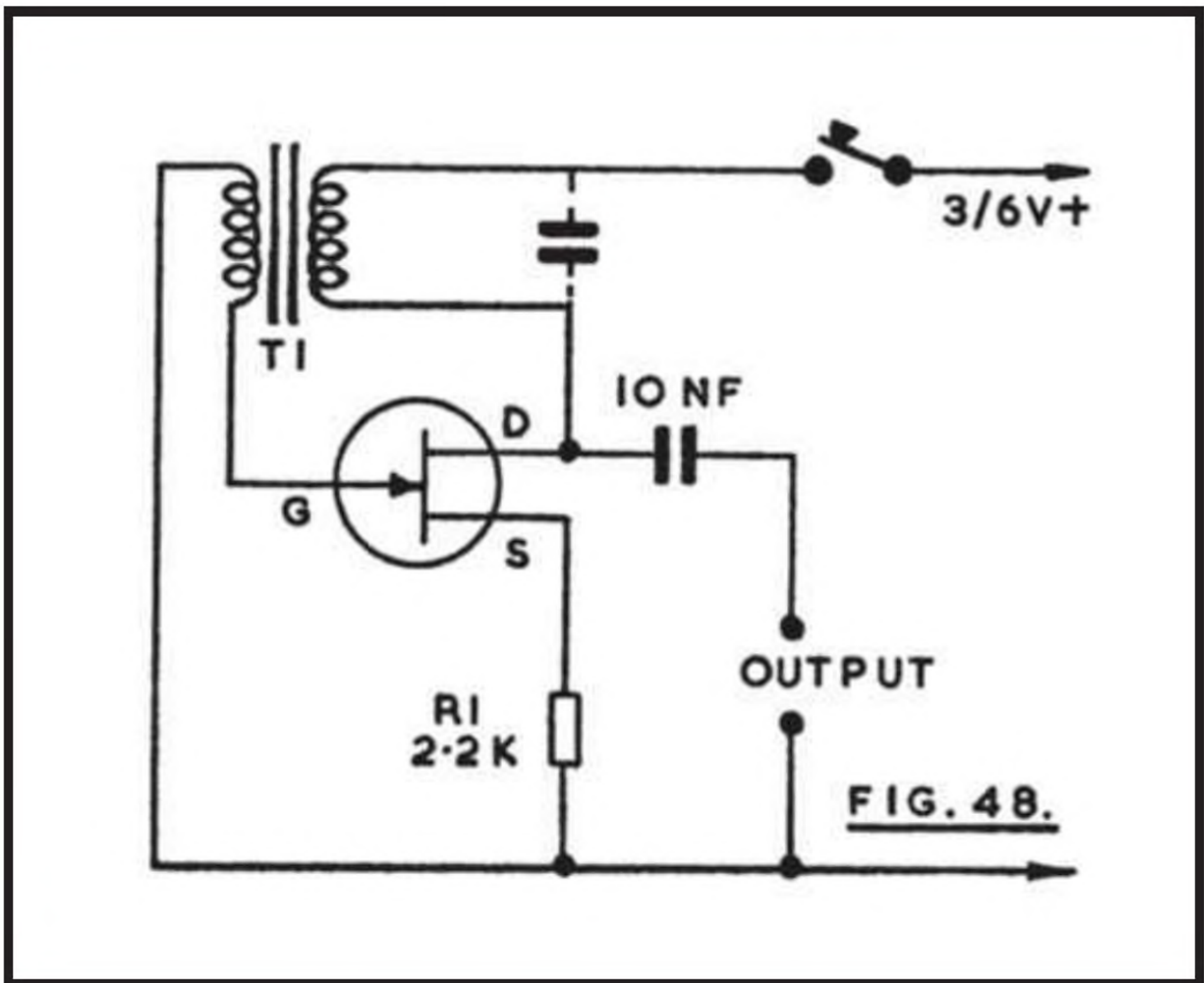
Apart from Scout and similar activities, the Morse Code is often studied with a view to obtaining an amateur transmitting licence. Figure 48 shows a simple audio oscillator which does well for this purpose. Output is easily adequate for personal practice with medium or high impedance headphones, or the signal can be fed into an amplifier for use by a group.

T1 is a coupling transformer as used between driver and output pair in amplifiers and receivers. The centre tap which will be present is ignored. The transformer primary is connected between drain and key (positive) and the secondary from gate to negative line. If no oscillation is obtained, reverse connections to one wind-

ing. Many surplus transformers can be made to work satisfactorily here.

The pitch, or tone, produced can be adjusted over wide limits. A strong, moderately high tone is generally preferred. Any audio or general purpose FET should be satisfactory.

A capacitor in parallel with one winding of T1 will lower the tone. The value of R1 can also be modified, as can the battery voltage. Loading of the output circuit by the phones will also influence the tone. Little difficulty should be experienced in obtaining a suitable pitch.



When sending Morse, a dash should be equal in length to three dots. The spaces between parts of a letter equal one dot, and a space of three dots is left between letters, and five dots between words. When learning at lower speeds, it is best to form the letters rapidly, but leave longer intervals between them.

The following will prove of aid to those just starting the code:

A	·-	N	-·	1	·- - - -
B	- · · ·	O	- - -	2	· · - - -
C	- · · ·	P	· - - ·	3	· · · - -
D	- · ·	Q	- - · -	4	· · · -
E	·	R	· · ·	5	· · · ·
F	· · ·	S	· ·	6	- · · ·
G	- - ·	T	-	7	- - · · ·
H	· · ·	U	· · -	8	- - - · ·
I	· ·	V	· · -	9	- - - - ·
J	· - - -	W	· - -	0	- - - - -
K	- · -	X	- · · -		
L	· · ·	Y	- · - -		
M	- -	Z	- - · ·		