

28 ASR TELETYPEWRITER
ARRANGED FOR AUTOMATIC TRANSMITTER START CONTROL
(HALF-DUPLEX OPERATION)

1.0 PURPOSE

1.01 The purpose of this arrangement is to place a 28H transmitter-distributor under the control of contacts in the stuntbox of a 28E, F or G Typing Unit so as to permit the T-D to respond to the "transmitter start" and "quiet" codes sent remotely from a sequentially coded automatic transmitter start (SCATS) circuit.

2.0 WORKING LIMITS

2.01 The transmitter start codes used with this arrangement must be of the form FIGS A ITRS where A may be any alphabetical character other than H or Q (see BSP E12.720).

2.02 The "quiet" code for this arrangement must be FIGS Q ITRS (normally obtained by the insertion of a "Q" plug in the SCATS code generator).

2.03 This arrangement imposes no special speed or loop restrictions.

3.0 FUNCTIONS

3.01 To recognize the assigned transmitter start code and to start transmission if tape is in the gate when the code is received.

3.02 To recognize end of tape or taut tape and to stop transmission.

3.03 To assume a "quiet" condition upon recognition of the assigned code.

3.04 To transmit two or three perforated characters if tape is placed in the gate during the "quiet" condition.

3.05 To release from the "quiet" condition on the first space signal transmitted from this or any other station following the last character of the quiet code.

4.0 DESCRIPTION OF OPERATION

4.01 When the transmitter start code from the SCATS Control and Coding circuit is received in the AN stuntbox, the function bars and levers in slots 19 and 20 will operate in sequence and momentarily close the normally open contact over slot 20. If there is tape in the gate of the T-D at this time and the manual switch has been operated, the operate path of relay (TS) will be completed. Relay (TS) will operate and lock thru the slot 34 contact and will close the path to operate the Transmitter Clutch Release magnet to start transmission.

4.02 If, during transmission, the tape should become taut, tangled or torn, the lock path for the (TS) relay will be broken, and transmission cannot start again until a new poll is made by the SCATS controller. At the end of tape, the (TS) relay will be released to stop transmission in the normal manner.

4.03 This arrangement includes a "quiet" feature to permit search codes to be withheld when no station has tape to send. The "quiet" code will be transmitted at least once during a polling cycle. When this code is received in the AN stuntbox, the function bars and levers in slots 32 and 33 will operate in sequence and close the normally open contact over slot 33 until the next character is received. If tape is placed in the gate of the T-D at this time the (TS) relay will operate to start the transmitter which should be loaded in such a way that the first four or five characters to be transmitted will be LTRS. As soon as transmission starts the function bar and lever in slot 34 (which was ungated by slot 33) will operate to open the normally closed contact and unlock the (TS) relay which will stop transmission of the LTRS characters. The station will now be polled in the usual way. The slot 34 contact will also operate on a line hit or on transmission from any other station on the line.

5.0 EMERGENCY OPERATION

5.01 In the event of a failure of the SCATS Control and Coding circuit, it is possible to start the transmitter in the following manner:

- a) Place tape in gate.
- b) Operate K-KT-T switch to K position
- c) Observe that BUSY lamp is dark (circuit is idle)
- d) Operate LINE-TEST key to TEST
- e) Type transmitter start code (FIGS-----LTRS)
- f) As soon as the transmitter starts, restore LINE-TEST key to LINE

Q.T.