

6A KEY TELEPHONE SYSTEM

IDENTIFICATION

1.00 INTRODUCTION

1.01 This section covers the description and use of the 6A key telephone system. Because this is a large-capacity system incorporating optional features, it has a wide field of application.

1.02 Due to extensive changes, marginal arrows have been omitted.

2.00 GENERAL

2.01 Some optional features of the system can be obtained by strapping changes on key telephone units; other features require the addition of key telephone units. To change from a single-talking link to a two-talking link, the station signaling circuits must be changed.

2.02 An instruction card, form E-4649, for station systems key telephone sets, should be furnished at each station.

3.00 ARRANGEMENTS

Selector Only (Fig. 1)

3.01 This arrangement provides for:

- Access to a common talking path for a maximum of 36 station codes. Although no dial tone is furnished, a path is prepared for selection of another intercommunicating station.
- Dial station selection.
- Station signaling over a separate pair by means of a single-spurt audible signal.
- Line-busy lamp.

- A maximum of seven stations on a preset conference by dialing of a code or by operation of a signal key.
- Connections to an off-premise station.
- Add-on conferencing of a central office or PBX line to the intercommunicating line. The central office or PBX line to be conferenced is under control of the associated key telephone system. A hold is placed on the central office or PBX line, the desired intercommunicating station is signaled, and a talking path is established. By operation of the add-on conferencing key, the central office or PBX line is connected to the intercommunicating line.

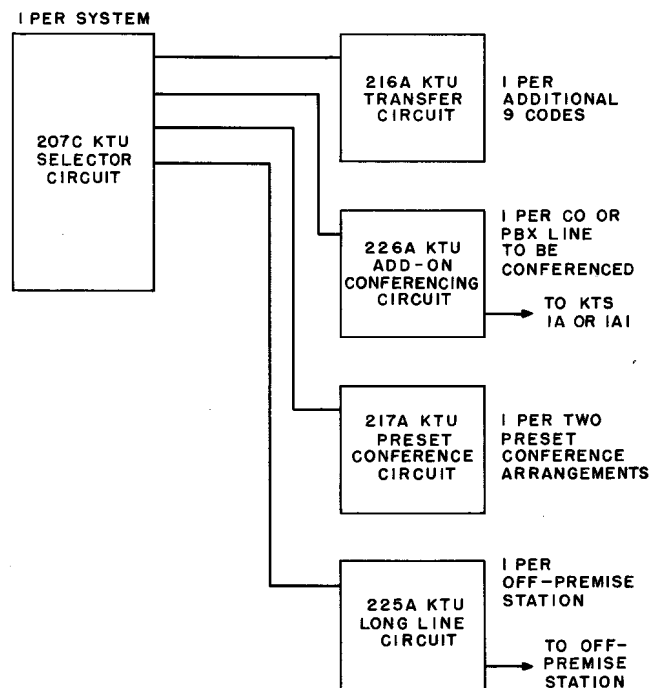


Fig. 1 — Selector-only Arrangement

Single-talking Link (Fig. 2 and 3)

3.02 This arrangement provides for all features shown in the selector-only arrangement and also provides for:

- Selective and code signaling by means of signaling keys, as well as dial selective signaling.
- Flashing line lamps.
- Station signaling over *T* and *R* leads.
- Station common audible per SD-69294-01.
- A primary talking link between called and calling station.
- Automatic cutoff of stations.

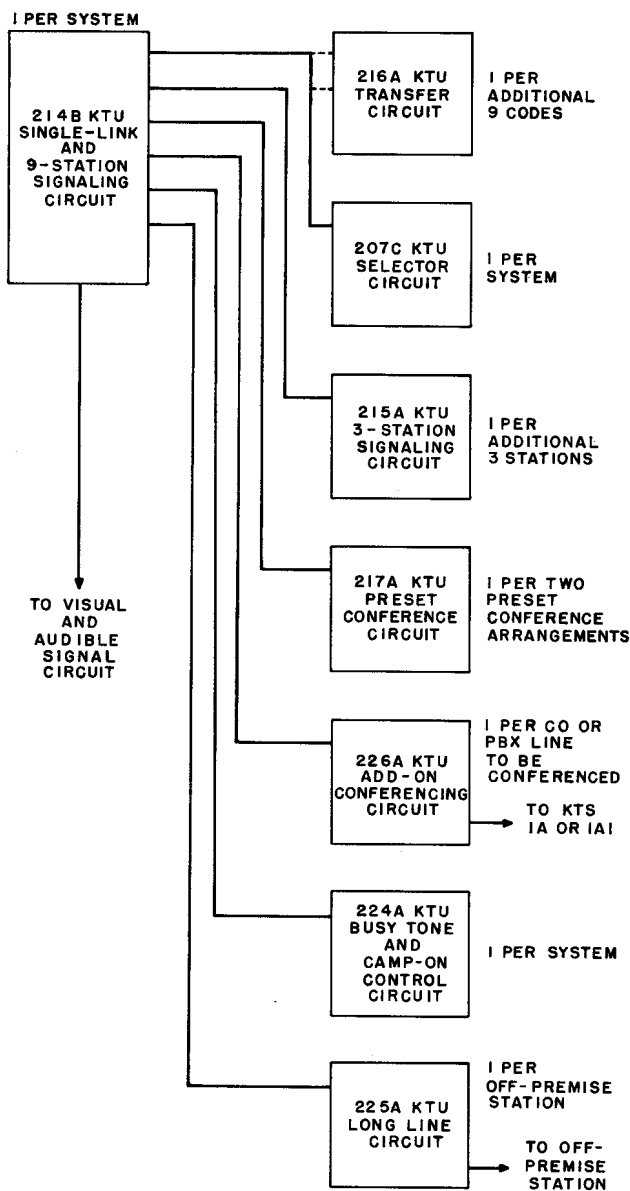


Fig. 2—Single-link Arrangement, Using 214A KTU

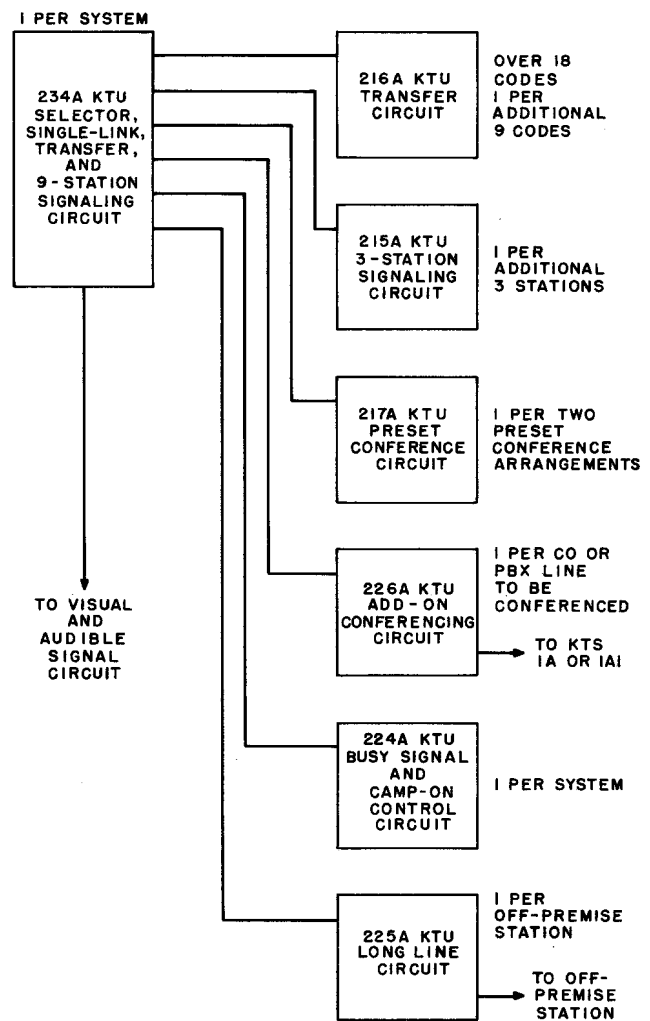


Fig. 3—Single-link Arrangement, Using 234A KTU

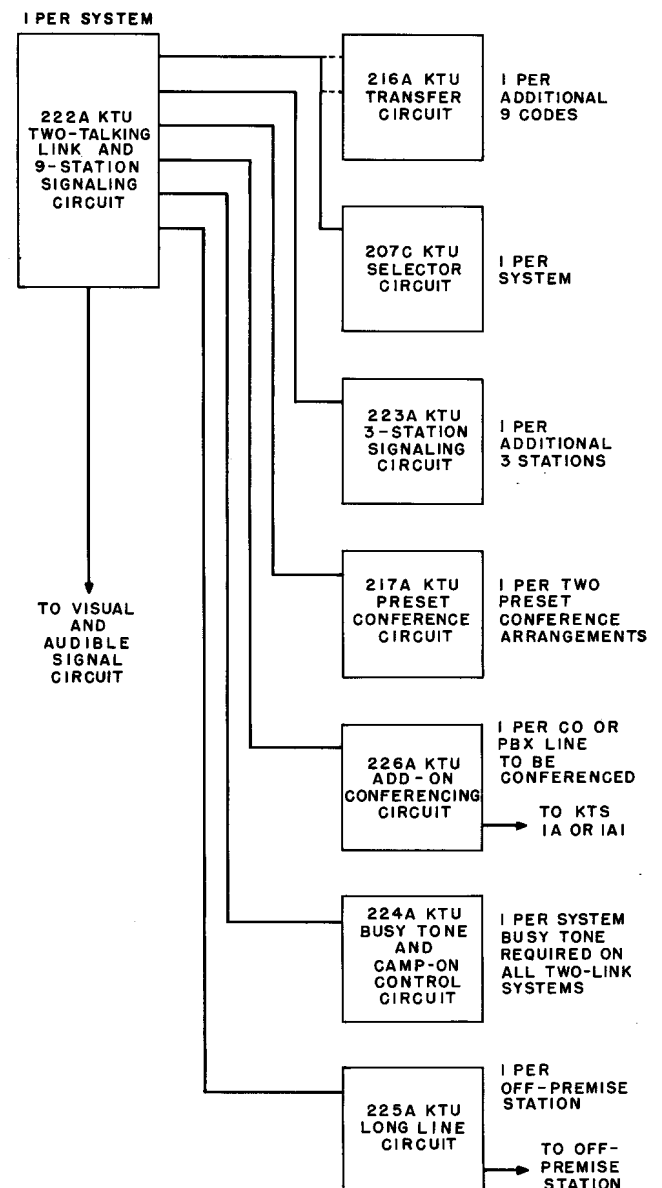
- Flashing lamps sustained until all stations on a preset conference have answered.
- Camp-on. This feature allows a station to pick up, dial, and select a station while the intercommunicating system is in use. The dialed code is stored, and the system is reserved, or camped-on. When the system becomes free, the previously selected station is automatically signaled without further operation by the calling station.
- Busy tone to a station originating camp-on and to any other station trying to originate a call on a system which is being camped-on.
- Dial tone to a calling station.
- Interrupted ringing.
- Interrupted audible ringing tone to a calling station.

Two-talking Link (Fig. 4)

3.03 This arrangement provides for all features shown in the selector-only and single-link arrangements and also provides for:

- Secondary talking link. This enables one system to carry on two simultaneous and independent conversations.
- Busy tone to the calling station when the called station is busy, or when some of the stations which are to be part of a conference connection are busy.
- Camp-on extended to reserve the next call to a station when the called station is busy on secondary link and primary link is idle.

Fig. 4 – Two-talking Link Arrangement



SECTION C71.011

4.00 APPARATUS

Coded key telephone units used in the 6A key telephone system are listed in Table A.

TABLE A

KTU Code	Circuits	Number Required	Panel Width		Fig. No.
			inches	7/16-inch modules	
207C	Selector	1 per System	5-1/4	12	5
214B	9-station Battery Feed and Signaling (Single Link)	1 per System	16-5/32	32	7
215A	3-station Signaling (Single Link)	1 per Additional 3 Stations	3-15/16	9	6
216A	Transfer	1 per Additional 9 Codes	3-1/16	7	8
217A	Preset Conference Control	1 per 2 Preset Conf Arr	3-1/16	7	9
222A	9-station Battery Feed and Signaling (Two Link)	1 per System	23	49	10
223A	3-station Signaling (Two Link)	1 per Additional 3 Stations	5-11/16	13	11
224A	Busy Signal and Camp-on Control	1 per System	3-1/2	8	12
225A	Long Line	1 per Off-premise Sta	2-3/16	5	13
226A	Add-on Conference Control	1 per Line To Be Conf	3-1/2	8	14
227A	Auxiliary Slave Relay	See Note	3-1/16	7	15
228A	Blank Apparatus Panel Assembly	As Required	3-15/32	8	
229A	Multiple Add-on Conferencing Transfer	1 per 2 to 7 Lines To Be Conferenced at a Station	3-1/16	7	
232A	Visual and Audible Signal	1 per System	3-15/32	8	16
234A	9-station Battery Feed and Signaling (Single Link), Selector, and Transfer	1 per System	23	49	17
19B	Flashing	1 per System (As Required)	Mounting Detail per Local Engineering		

Note: Additional contacts may be obtained with the 227A KTU for:

- Lamps
- Common audible
- Single add-on conferencing
- Ringing and tone control
- Signaling over separate pairs

5.00 IDENTIFICATION

For identification of the various key telephone units, refer to Fig. 5 through 17.

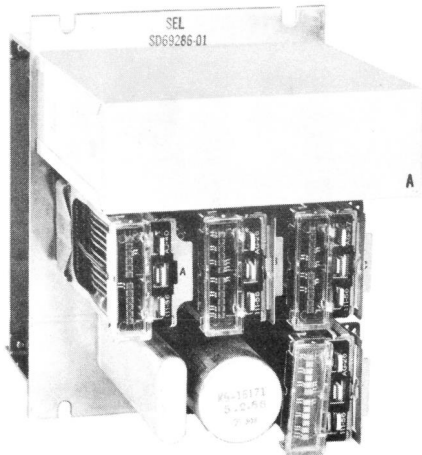


Fig. 5 - 207C KTU, Selector Circuit

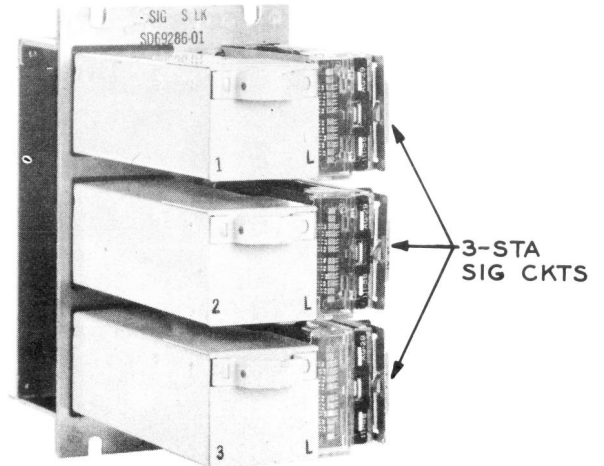


Fig. 6 - 215A KTU, Signaling Circuit, Single-talking Link

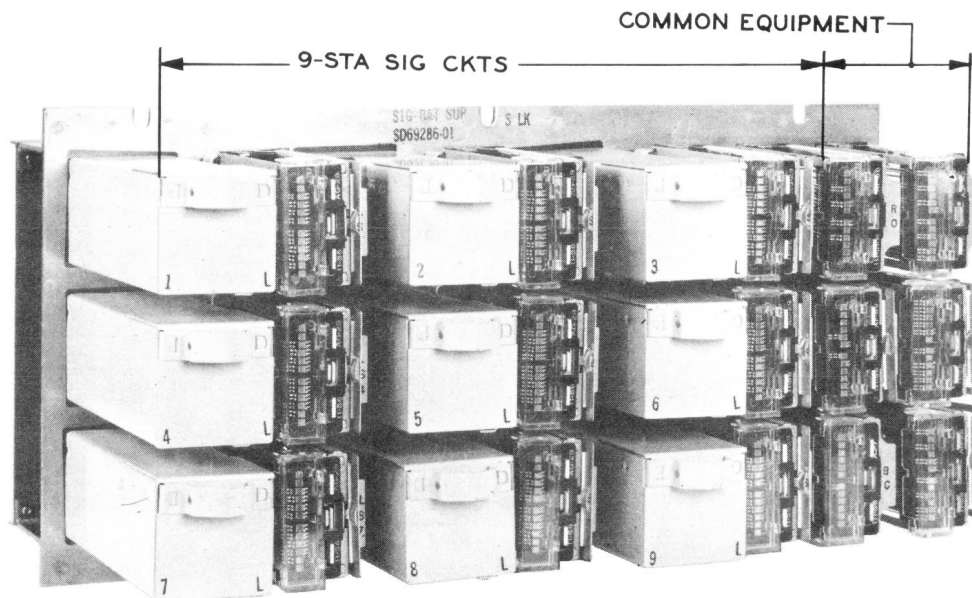


Fig. 7 - 214B KTU, Battery Supply and Signaling Circuit, Single-talking Link

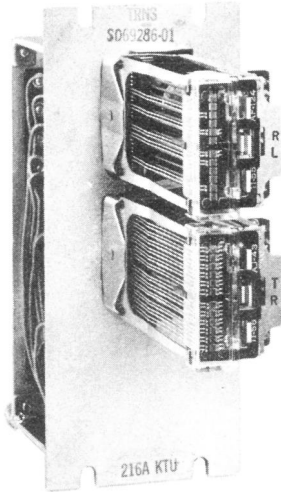


Fig. 8 — 216A KTU, Transfer Circuit

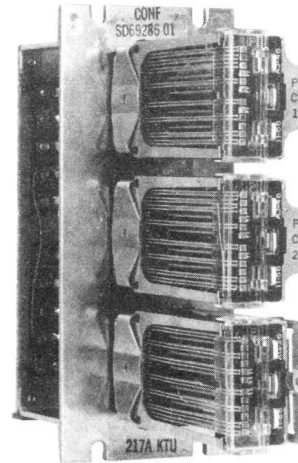


Fig. 9 — 217A KTU, Preset Conference Control Circuit

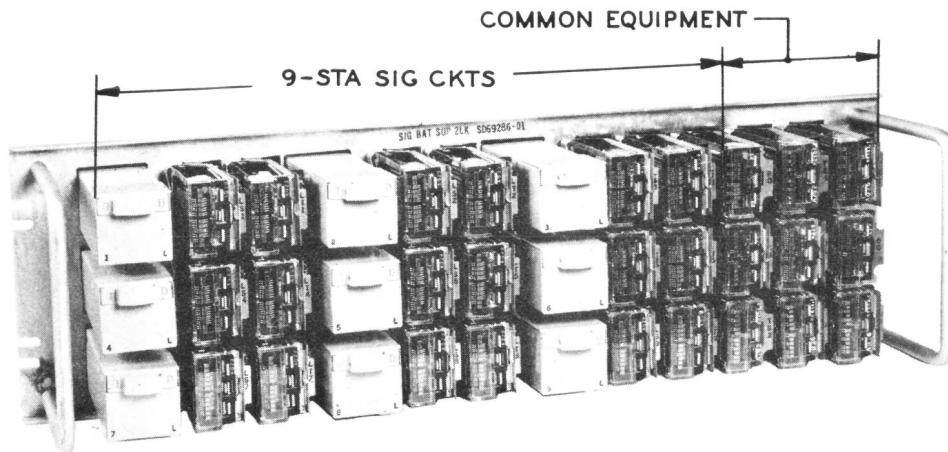


Fig. 10 — 222A KTU, Battery Supply and Signaling Circuit, Two-talking Link

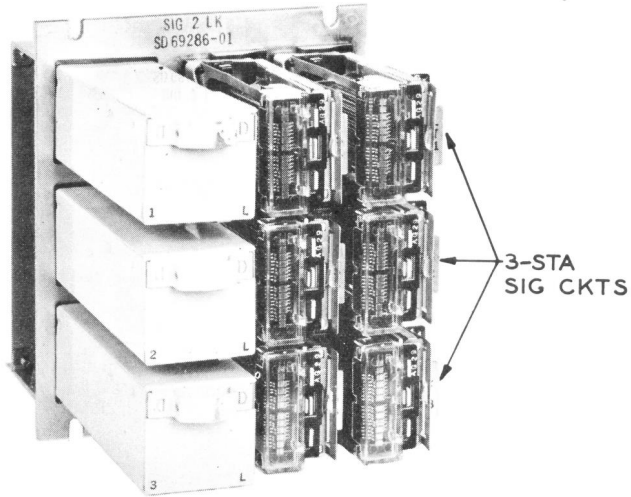


Fig. 11 - 223A KTU, Station Signaling Circuit, Two-talking Link

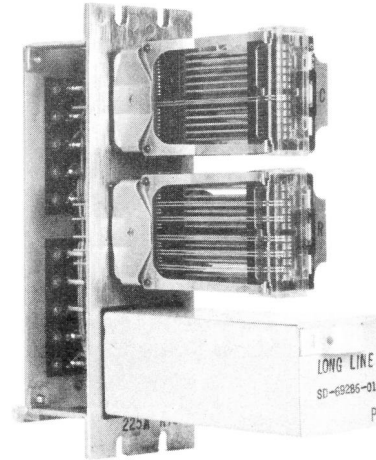


Fig. 13 - 225A KTU, Long Line Circuit

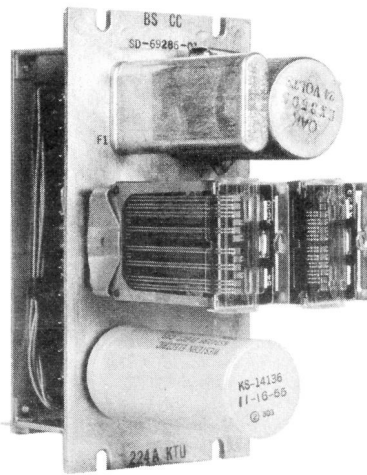


Fig. 12 - 224A KTU, Busy Signal and Camp-on Control Circuit

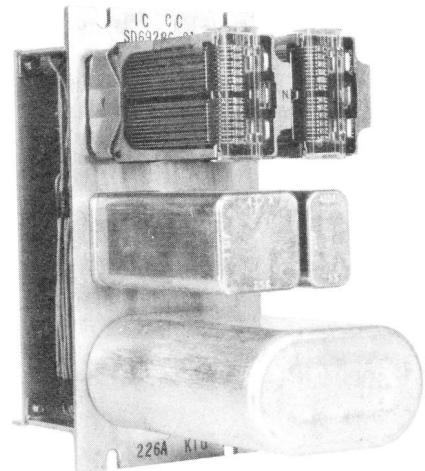


Fig. 14 - 226A KTU, Add-on Conferencing Control Circuit

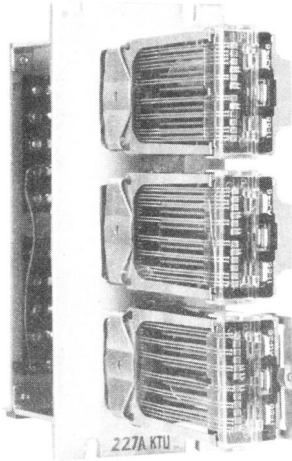


Fig. 15 - 227A KTU, Auxiliary Slave Relay Circuit

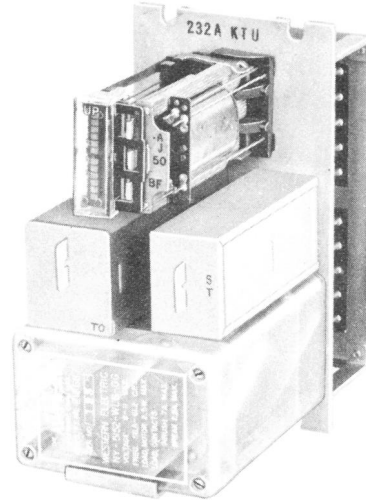


Fig. 16 - 232A KTU, Visual and Audible Signal Circuit

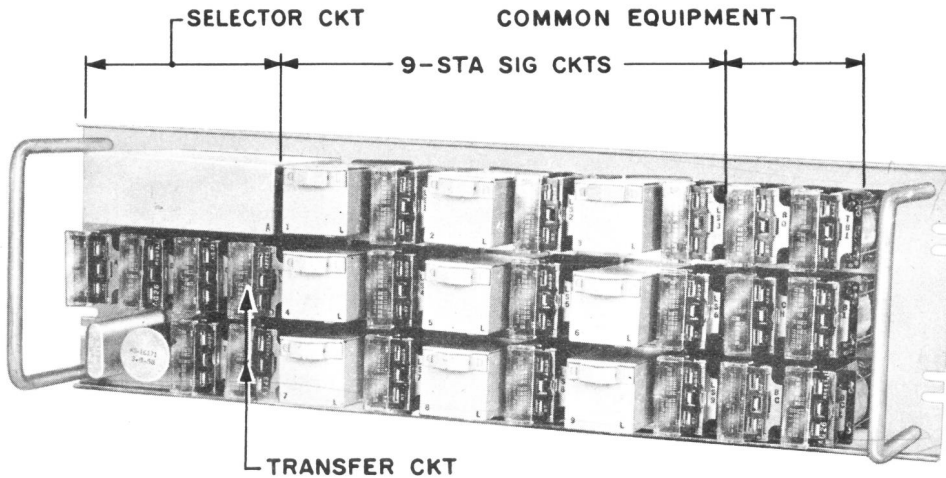


Fig. 17 - 234A KTU, Battery Feed and Signaling (Single-link) Selector and Transfer Circuit