

CENTRAL OFFICE UNATTENDED OPERATION
ALARM TRANSFER PROCEDURE

1. GENERAL

1.01 This practice outlines the procedures to be followed for treating office alarms when a dial switching office is to be unattended. No attempt is made to describe in detail the various alarm transfer circuits or arrangements as this subject is covered in other practices and P.E.L.'s.

1.02 The general systems available are:

<u>Type Equipment</u>	<u>Type Available</u>
355A, 350 and #1 SXS	Alarm Checking and/or Operating Room Extensions. See Paragraph 2.02.
No. 4 Crossbar	Operating Room Extensions. See Paragraph 2.01.
Panel, Crossbar Tandem, No. 1 & No. 5 Crossbar	Common Alarm Transfer System (Maximum 70 Indications) See Paragraph 2.03.

1.03 The alarm receiving locations for the above systems may be either another equipment room or the traffic operating room.

2. DESCRIPTION

Operating Room Extensions

2.01 This is the type circuit in general use for SXS offices and could be used for No. 4 Crossbar Offices. Operating room extensions are essentially a multiple appearance of switchroom visual indications. Alarms

transmitted to the operating room by an extension of the switchroom alarm system will terminate in distinctive colored lamp signals and indicate only if the alarm is major or minor.

Alarm Checking

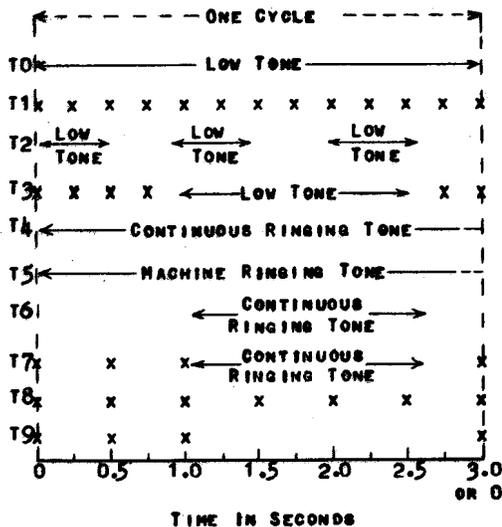
2.02 This is the type circuit in general use for CDO's. The alarm indication for the alarm checking circuit is transmitted either by separate facilities or via an interoffice trunk and will either cause a specially designated lamp to light, with or without an audible alarm, or an interoffice trunk to become "permanent." Certain codes are then dialed back to the originating office where the alarm checking equipment produces various audible tones indicating the nature (major, minor, or permanent signal) of the alarm.

Alarm Transfer System

2.03 This is the type circuit in general use for No. 5 Crossbar offices and can be used for Panel, Crossbar Tandem, and No. 1 Crossbar offices. It is a code combination of lamp signals and tones. A maximum of 70 different indications may be used. Alarms transmitted to the alarm receiving location by the Alarm Transfer System will cause one of eight specially designated lamps (A0 to A7) located either in the alarm receiving cabinet or in the switchboard to light. To further identify the alarm a tone is transmitted along with the lamp signal, and may be received by listening to the receiver on the alarm receiving cabinet, or by plugging into the jack associated with the lamp at the switchboard. The lamp and tone signal

will remain in until released at the alarm receiving location by either operating the AR key on the alarm receiving cabinet or by plugging into the AR jack in the switchboard. The lamp and tone signals will immediately return (i.e. will not release) if the alarm condition still exists in the originating office. If the alarm condition has cleared the alarm indications will not return.

2.04 The Alarm Transfer System equipment may be activated from the originating office by operation of the TR key and deactivated by the release of this key. It may also be activated from the alarm receiving location by operating the AR key or by plugging into the AR jack at the switchboard. It is necessary to keep the plug in the AR jack for 10 seconds in Panel and No. 1 Crossbar offices, and five seconds in No. 5 Crossbar offices. When the alarms are transferred, a continuous low tone is transmitted to the alarm receiving location without any visual indications. A check should be made immediately after an office is scheduled to go unattended to see that the alarms have been transferred.



X = BATTERY CLICK

FIG. 1 - TONE AND CLICK COMBINATIONS

3. PROCEDURE

3.01 The alarms shall be transferred to the alarm receiving location each time the office is to be unattended.

3.02 The Plant Department Supervisor in charge of the originating or alarm transferring office shall prepare and furnish to the alarm receiving location written instructions for the proper handling of the alarms according to the type circuit being used. These instructions should include; (1) a list of all possible alarm indications and disposition of each, (2) a call list of plant personnel to be notified.

3.03 The alarm receiving location shall prepare a log on Form SW-9112, Exhibit 1, and forward to the Supervisor in charge of maintenance of the originating office. The log may be forwarded after each unattended period, but shall be forwarded not less than once a week.

3.04 The list of alarm indications and instructions (Paragraph 3.02 and Exhibit #2) should be posted near the alarm receiving location. (For example: under keyshelf glass of the switchboard position containing the alarm receiving unit).

3.05 The action on each alarm will vary with local conditions and, therefore, no universal procedure can be developed. However, in general, the following procedure should be followed for the alarm transfer system and modified appropriately for the other systems:

1. Identify the lamp signal.
2. Listen for and identify the tone signal (See Figure 1).
3. Refer to alarm table and identify alarm.

4. Attempt to release alarm.
5. Take action as indicated by instructions.

The action taken will vary from an immediate call to plant personnel of the office involved, to a call only after repeated indications, to no call at all. In all cases appropriate entries should be made in the alarm log.

4. RESPONSIBILITY

4.01 When the alarm receiving location

is located in Plant quarters, it shall be the responsibility of the Plant supervisor in charge to see that the above procedures are carried out.

4.02 When the alarm receiving location is located in Traffic quarters, it shall be the responsibility of the Traffic supervisor in charge to see that the above procedures are carried out.

Attached: Exhibits 1 and 2.

EXHIBIT 2

SAMPLE ALARM INSTRUCTIONS
 (For Alarm Transfer System)

CENTRAL OFFICE ALARMS

TONE CHART

TONE SIGNAL	TONE
T0	STEADY DIAL TONE
T1	RAPID CLICKS (4 PER SEC.)
T2	INTERRUPTED DIAL TONE (1/2 SEC. ON, 1/2 SEC. OFF)
T3	DIAL TONE AND CLICKS (1-1/2 SEC. TONE - 6 CLICKS - 1-1/2 SEC. TONE, ETC.)
T4	STEADY RINGING TONE
T5	MACHINE RINGING TONE (2 SEC. ON - 4 SEC. OFF)
T6	INTERRUPTED RINGING TONE (1-1/2 SEC. ON - 1-1/2 SEC. OFF)
T7	RINGING TONE AND CLICKS (1-1/2 SEC. TONE - 3 CLICKS - 1-1/2 SEC. TONE, ETC.)
T8	SLOW CLICKS (2 PER SEC.)
T9	SLOW CLICKS & SILENT INTERVAL (3 CLICKS - 2 SEC. SILENT - 3 CLICKS, ETC.)

- SUPERVISING ALARMS -

- WHEN AN ALARM INDICATION APPEARS:
1. PLUG SWITCHBOARD CORD INTO JACK ASSOCIATED WITH LAMP INDICATING ALARM. THIS WILL SILENCE AUDIBLE.
 2. LISTEN FOR TONE -- REFER TO TONE CHART AND IDENTIFY TONE.
 3. REFER TO SIGNAL TABLE -- IDENTIFY ALARM & TAKE ACTION AS INDICATED.
 4. ATTEMPT TO RELEASE ALARMS: REMOVE PLUG FROM ALARM JACK & INSERT IN ALARM RELEASE (AR) JACK. LEAVE PLUG IN AR JACK FOR A PERIOD EXCEEDING ONE SECOND -- THEN REMOVE.

NOTE!

IF ALARM CONDITION CONTINUES TO COME IN OFTEN, AND PERSISTS FOR FIFTEEN MINUTES, DISREGARD ACTION COLUMN OR SIGNAL TABLE AND CALL WIRE CHIEF.

ACTION INDEX

SEE CALL LIST BELOW

- A - CALL IMMEDIATELY
 B - CALL IF ALARM CAN NOT BE RELEASED (SEE NOTE ABOVE)

CALL LIST

- FIRST - CH. SWITCHMAN, DICK ROE AD2-1234
 SECOND - WIRE CHIEF, JOHN DOE AD2-4321
 THIRD - SWITCHMAN, SAM JONES AD2-5678

SIGNAL TABLE

LAMP SIGNAL	TONE SIGNAL	ALARM	ACTION (SEE INDEX)
A0	NONE	RECEIVING CIRCUIT TROUBLE	A
	T1	PRETRANSLATOR 2ND TRIAL	B
	T2	AMA MASTER TIMER	A
	T3	AMA RECORDER & CONNECTOR	A
	T4	MKR. OR TV 2ND TRIAL, 0, 6	B
	T5	" " " " " 1, 7	B
	T6	" " " " " 2, 8	B
	T7	" " " " " 3, 9	B
	T8	" " " " " 4, 10	B
	T9	" " " " " 5, 11	B
A1	T1	PRETRANSLATOR 1ST TRIAL	B
	T2	AUTOMATIC MONITOR	B
	T3	SPARE	
	T4	MKR. OR TV 1ST TRIAL, 0, 6	B
	T5	" " " " " 1, 7	B
	T6	" " " " " 2, 8	B
	T7	" " " " " 3, 9	B
	T8	" " " " " 4, 10	B
	T9	" " " " " 5, 11	B
	T0	RECEIVING CIRCUIT TROUBLE	A
A2	T1-9	SPARE	
	T0	MAJOR POWER ALARM	A
A3	T1	MAJOR CENTRAL OFFICE ALARM	B
	T2	MINOR POWER ALARM	A
	T3	SPARE	
	T4	MAJOR CDO ALARM	A
	T5	AC COMMERCIAL POWER FAILURE	A
	T6-7	SPARE	
	T8	MAJOR PBX ALARM	B
	T9	LOCAL OPTION - 1ST PREF.	
	T0	SENDING CIRCUIT TROUBLE	A
	A4	T1	PERMANENT SIGNALS
T2-9		SPARE	
T0		RECEIVING CIRCUIT TROUBLE	A
A5	T1-3	SPARE	
	T4	REPEATER STATION ALARM	A
	T5	CARRIER ALARM	A
	T6	SPARE	
	T7	LOCAL OPTION - 2ND PREF.	
	T8-9	SPARE	
	T0	LOAD ALARMS	B
A6	T1	SPARE	
	T2	MINOR CENTRAL OFFICE ALARM	B
	T3	SPARE	
	T4	MINOR CDO ALARM	B
	T5-7	SPARE	
	T8	MINOR PBX ALARM	B
	T9	SPARE	
A7	T1-9	SPARE	
	T0	SENDING CIRCUIT TROUBLE	A
	NONE	SENDG. & RCVG. CIRCUIT TROUBLE	A