

CENTREX SERVICE

ATTENDANT FACILITIES

CALL DISTRIBUTORS

Attendant seeking traffic, such as listed number, DID transfer request, and dial "O" calls, are allotted to the Centrex customers' attendant positions through a call distributor when these positions are arranged for release loop operation. There are three types of distributors available—(1) for single or multi-customer operation in both the No. 5 crossbar and the step-by-step Centrex systems, (2) for single customer operation in step-by-step Centrexes when up to a maximum of 4 console positions are required, and (3) for single customer operation in step-by-step Centrexes when the 608A cord switchboard is provided. The details of these call distributors are covered below.

Single or Multi-Customer Call Distributor (Fig. 1)

This call distributor consists of a call distribution circuit and the associated trunk and position finders. It can be used for single customer operation or can serve a maximum of 4 customers. Up to 99 trunks, and 10 console positions or 99 attendant loops to switchboards can be served. Its application with the various Centrex systems is as follows:

No. 5 Crossbar Centrex requires this distributor when multi-customer operation is provided. It is also required for single customer operation when consoles, arranged for release loop, are provided. When the console loops are connected directly to the customer's attendant trunks (single console position operation, for example), a distributor will not be required. A distributor is also not required when the 608A switchboard is provided as the attendant facility.

Step-by-Step Centrex requires this distributor when multi-customer operation is provided and the attendant positions are either consoles or 608A cord switchboards. It is also required when more than 4 consoles are provided for a single customer.

The call distributor is designed with an A and a B group to permit a call in each group to be switched

simultaneously. A maximum of 12 trunk and position finders can be associated with each group. When multi-customer operation is required, two customers can be assigned to each group. The specific levels assigned to a particular customer must be the same on both the trunk and position finders. The trunks terminated on the trunk finder levels 1-5 in the A group will have matching appearances on similar terminals on levels 6-0 in the B group. Similarly, trunks on levels 1-5 in the B group appear on levels 6-0 in the A group. The lower levels have preference in each of the respective groups. Cord switchboard or console attendant loops are terminated on levels 1-5 with matching appearances on levels 6-0 of the position finder levels in a similar manner to the trunk arrangements described above.

Trunks appearing on a particular level of the trunk finders in either group will seek connection to the corresponding level on the associated position finders. This arrangement provides each incoming trunk with a first preference for a particular console or group of switchboard attendant loops thus offering a more even distribution of traffic to the console team. However, this has no effect as far as the switchboard attendant loops are concerned, since these loops are terminated in switchboard multiple common to all positions. The trunks should be evenly assigned to all allocated levels to maintain the preference pattern with console operation, i.e., an equal number of trunks should be assigned to each level allocated to a customer. Moreover, first, second,—etc., choice trunks should be equitably distributed over all these levels to avoid overloading certain positions. This assignment procedure is not necessary when the 608A switchboard is provided.

The calls routed through this distributor will not be lost if all finders in both the A and B groups are busy, all console positions are busy, or all switchboard loops are busy. Audible ring will be returned to the calling subscriber for the duration of the delay and the connection will be established as soon as the busy condition is removed.

Single Customer Distributor—Step-by-Step Centrex with Consoles (Fig. 2)

This call distributor is only applicable with step-by-step Centrexes arranged for release loop console operation. It contains a call distribution circuit and the associated trunk finders. Each trunk finder is connected directly to a specific attendant loop. The distributor is arranged for single customer operation only and a maximum of 24 trunk finders can be provided. Up to 99 incoming trunks and 4 console positions can be associated with it. The incoming trunks appear on the levels of the trunk finders. Up to six trunk finders are directly associated with the loops terminated on each of the console positions.

This distributor does **not** provide subgroup operation. A preference arrangement is provided in the selection of the trunk finder to distribute calls evenly to the console positions. No special assignment procedures for trunks are required.

If all positions or trunk finders are busy, the call is not lost. Audible ring will be returned to the calling subscriber for the duration of the delay, and the connection will be established as soon as the busy condition is removed.

Single Customer Call Distributor—Step-by-Step Centrex with 608A Cord Switchboards (Fig. 3)

This call distributor is only applicable with step-by-step Centrexes arranged for 608A cord switchboard single cord operation. It consists of a simplified call distribution circuit with associated trunk finders. Each attendant loop is directly connected to a trunk finder as well as the switchboard jacks. Only one group is provided. Preference arrangements are not provided since they are not needed to distribute the calls to the positions. Two sizes are available—(1) a call distribution circuit arranged to function with a maximum of 12 trunk finders with up to 49 incoming trunks terminated on the TF levels, and (2) a call distribution circuit arranged to function with a maximum of 24 trunk finders with up to 99 trunks terminated on the levels of the TF selectors. In either case, no special trunk assignment procedures are required.

If all trunk finders are busy, the call is not lost. Audible ring is returned to the calling subscriber for the duration of the delay, and the connection will be established as soon as the busy condition is removed.

ENGINEERING RECOMMENDATIONS

Item	Recommendation
1. Multi or Single Customer Distributor Trunk finders and Position finders	Table 10
2. Single Customer Distributor—SxS Centrex for Consoles	Table 10
for 608A Switchboard	Table 10
Attendant Handled Calls	
Listed number—extension unknown	50
“ “ “ known	35
Transfer and Recall	40
Incoming FX—extension unknown	50
“ “ “ known	35
*Incoming automatic tie line	35
*Outgoing—local	35
* “ —LD—station	55
* “ —LD—person	75
* “ —LD—T&C	410 (held on console for duration of call)

*Console operation only.

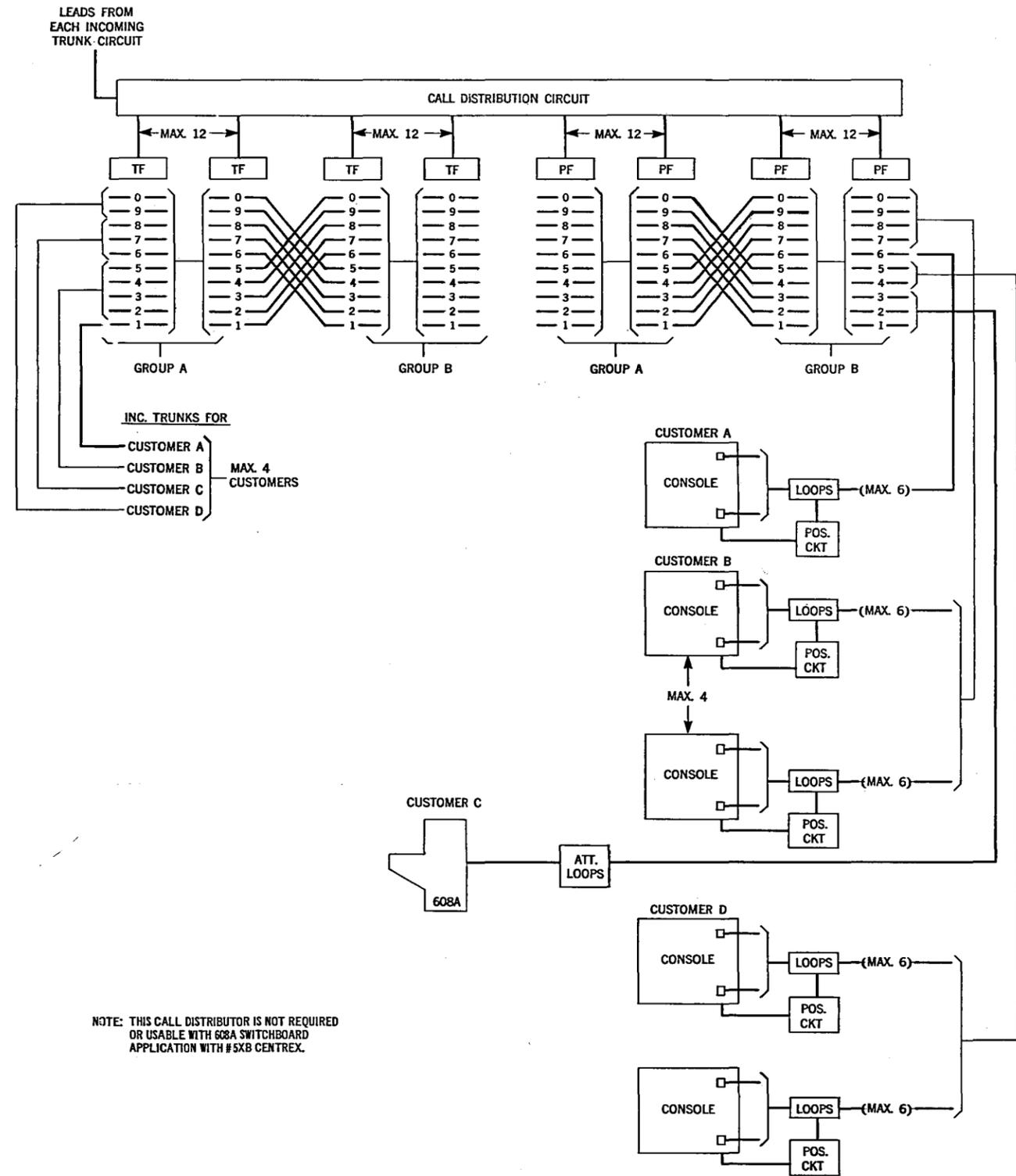


FIG. 1
MULTI- OR SINGLE CUSTOMER CALL DISTRIBUTOR

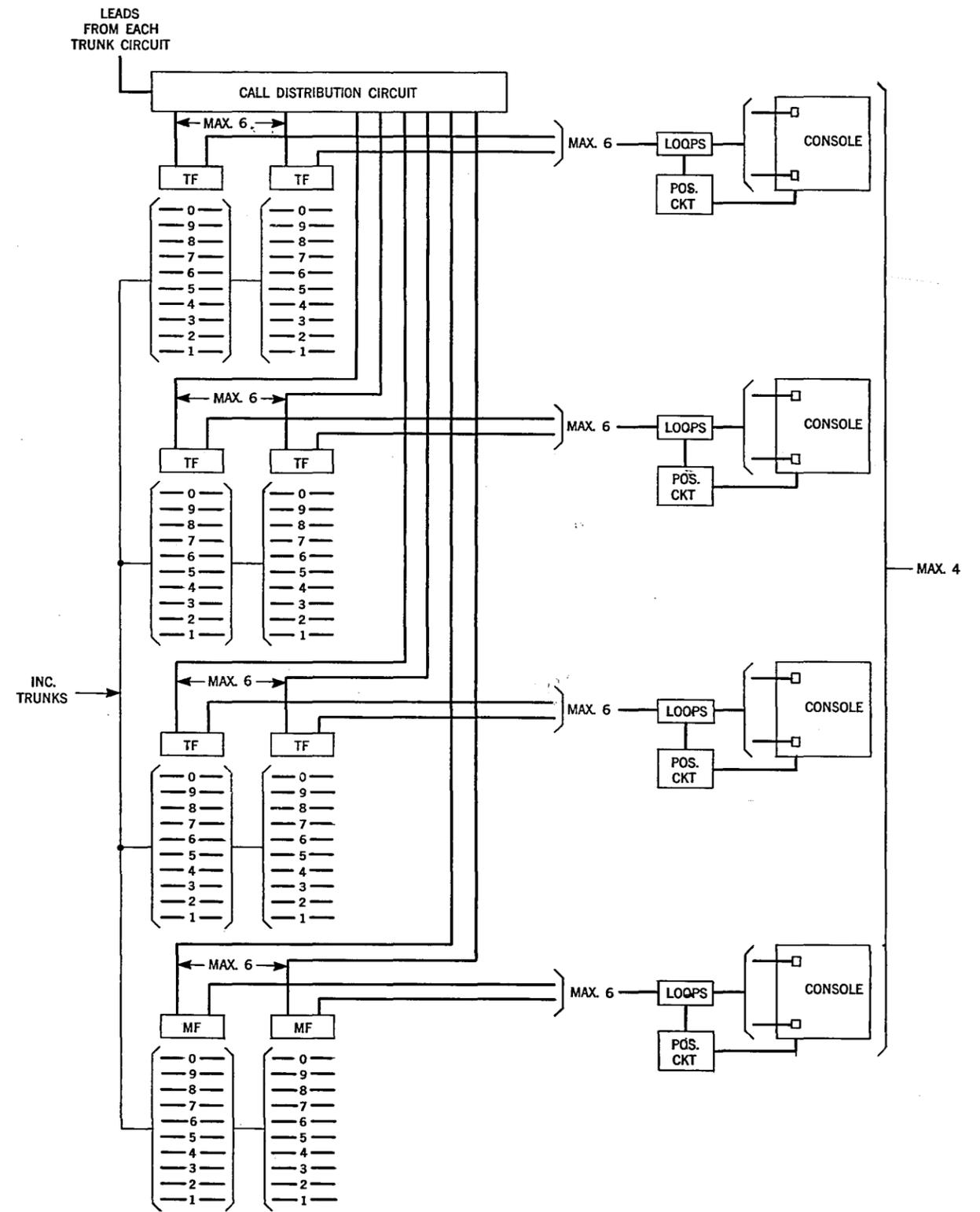
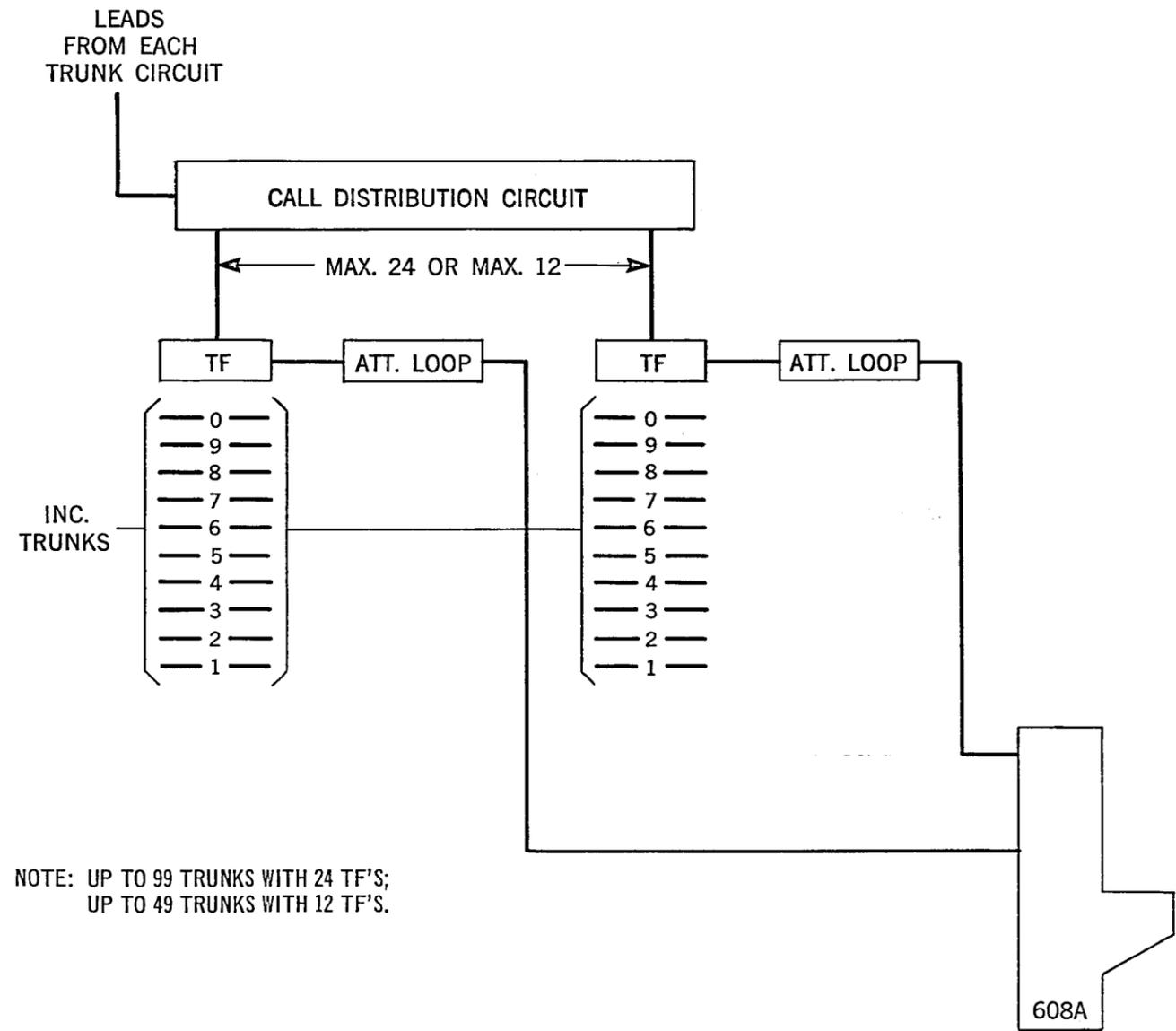


FIG. 2
SINGLE CUSTOMER CALL DISTRIBUTOR
STEP-BY-STEP CENTREX WITH CONSOLES



NOTE: UP TO 99 TRUNKS WITH 24 TF'S;
UP TO 49 TRUNKS WITH 12 TF'S.

FIG. 3
SINGLE CUSTOMER CALL DISTRIBUTOR
STEP-BY-STEP CENTREX WITH 608A CORD SWITCHBOARDS