

TELETYPE

AUTOMATIC

SWITCHING

PACKAGE



The Teletype Automatic Switching Package (TASP) is a "switchboard" unit developed for systems utilizing Teletype communications equipment.

TASP can serve state, county and local government agencies as well as commercial communications needs, interconnecting local or remote page printers for communication with one another.

Developed around a design principle that permits growth through the addition of modules, the basic system is capable of handling up to 20 circuits and can serve agencies of every size.

The outstanding feature of TASP is its versatile master control. It provides answer-back and automatic switching for circuit selection, offering a high degree of flexibility with priority, conference, and emergency call features.

Basically, TASP is composed of four sections:

- 1 Control circuit (admittance to switching package.)
- 2 Selector circuit with answer-back mechanism.
- 3 Line-connecting circuit.
- 4 Power supply units.

All components are practically maintenance-free and, as other Teletype products, are designed for 'round-the-clock service.

The following pages illustrate and describe a typical system utilizing TASP control.

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Basic Communications With

Shown and described here is a simplified version of a typical communications network utilizing TASP, the Teletype Automatic Switching Package.

Taking three circuits as an example, here is how basic circuit to circuit switching is automatically achieved by TASP:

Two-character call letters are assigned to each circuit, resulting in circuits "XA"—"XB"—and "XC" as illustrated.

Each circuit, in turn, has been arbitrarily assigned six stations (AB, AC, AD, etc.), although this figure could vary considerably.

NOTE: All function codes and call letters in this brochure have been arbitrarily chosen for purposes of illustration. They can be arranged to suit individual needs, if desired.

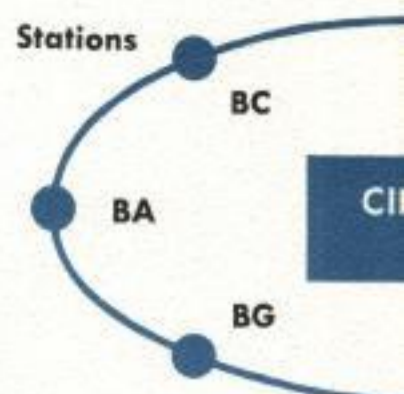
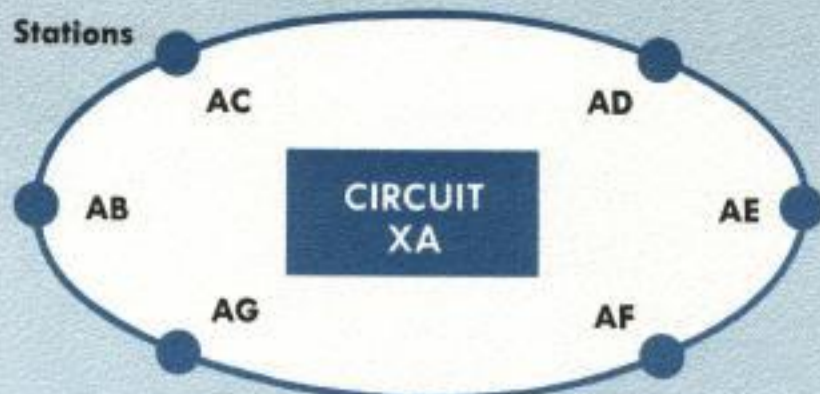
OPERATING PROCEDURES

TO CONTACT TASP

The calling operator (say, AC) depresses the LINE BREAK key of his Teletype Model 28 send-receive page printer. This actuates his printer and other printers on the XA circuit and simultaneously attempts to connect circuit XA to TASP. If TASP is available for circuit switching, the calling operator receives a "GA" (go ahead) by means of a yellow light on his printer. He then transmits his own station call letters to place his machine in a printing condition.

TO CALL STATIONS ON THE SAME CIRCUIT

To call stations on his own circuit, the calling operator transmits his own circuit's call letters. TASP then returns another "GA," page printed. Thus, local circuit XA will be reported busy to the network. The operator transmits each station's call letters and the end of address code (CR LF) to release TASP for further switching. Sta-



tions on circuit XA are now interconnected for transmission to one another.

TWO-CIRCUIT CALL

To call another circuit after the first "GA" from TASP the operator transmits his station's call letters to place his printer in a printing condition, followed by the call letters of the other circuit. Receipt of a second "GA" (printed) from TASP indicates the called circuit has been entered and is ready to accept information. He then places all printers on the called circuit in a printing condition by transmitting U N LTRS, followed by the end of address code (CR LF) and the message.

IF TASP IS BUSY

If TASP is busy when the operator attempts to place a call, he will not receive a "GA."

IF CALLED CIRCUIT IS BUSY

When the operator attempts to call another circuit and it is busy, TASP will send back a code combination (LTRS B Z LINE BREAK), disconnecting his circuit from TASP.

MULTI-CIRCUIT CALL

A call to a number of circuits involves procedures similar to those used for calling one circuit.

Monitor Receive-Only Printer for Circuit XA.

Monitor Receive-Only Printer for Circuit XB.

SWITCHING



SEND-RECEIVE PRINTER

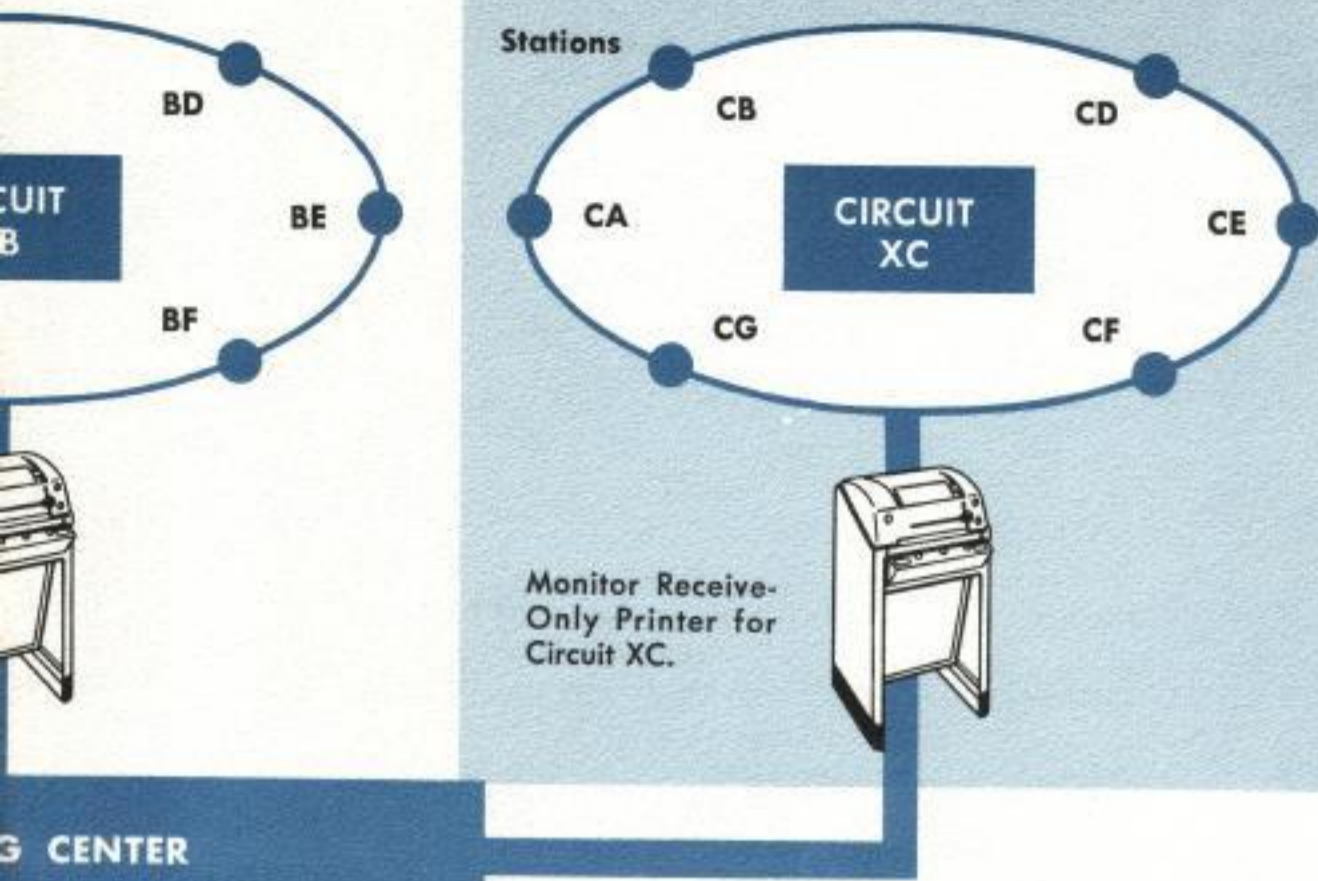
TASP

After receiving the initial "GA" from TASP the calling operator transmits a prefix code (FIGS Z). This code is inserted to prevent TASP from automatically disconnecting the calling station circuit if one of the other called circuits is busy. The operator then transmits the call letters of the first circuit.

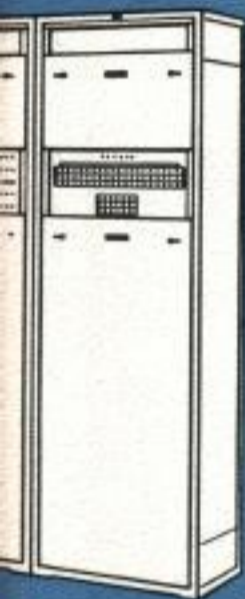
If the called circuit is available, a connection is made and TASP transmits "GA" to the calling operator.

The operator follows this procedure until all desired circuits are connected. To place all called cir-

Central Automatic Switching



SWITCHING CENTER



MONITOR
RECEIVE-ONLY
PRINTER

circuits in a printing condition he sends U N LTRS, transmits the end of address code (CR LF) to release TASP for further switching, and sends the message.

EMERGENCY CALL FROM SWITCHING CENTER

The switching center is equipped with a special applique unit used to call in any or all circuits for an emergency message.

To select desired circuits, the switching center operator presets switches on his applique unit—one for each circuit slated to receive the message.

Now, the switching center operator is ready to seize TASP. By observing a panel of lights on the applique unit he can determine whether the system is busy. If it is not busy he goes through the following procedure:

1. Operates "hold" key on applique unit.
2. Depresses LINE BREAK key to seize TASP.
3. Receives yellow-light "GA" from TASP.
4. Transmits his station's call letters to place his printer in a printing condition.
5. Transmits FIGS G to seize selected circuits.
6. Receives second "GA" from TASP, printed by his machine.
7. Transmits U N LTRS to place all printers on called circuits in printing condition.
8. Transmits end of address code (CR LF) to release circuit selecting portion of TASP.
9. Sends message.

The message is followed by a LINE BREAK to release circuits from TASP.

The Bonus Feature of Model 28 Page Printers

All Teletype Model 28 page printers are equipped with a "bo-

nus" component called a STUNT BOX. This device is used to accomplish non-printing functions, such as selection of certain printers to receive a message.

This method of contacting individual page printers is **selective calling**, and can be used by any station in the system.

When desired circuits have been called prior to the end of address code, the operator can call specific stations on these circuits by using the selective calling capabilities of their stunt boxes.

The operator transmits the call letters of all the stations he wishes to get in touch with, including his own. Selected stations may manually or automatically acknowledge these calls, if desired. The calling operator then transmits the end of address code (CR LF) followed by the message. Stations not selected do not receive the message.

AUTOMATIC TIME DELAY

If the calling operator inadvertently neglects sending the end of address code (CR LF), TASP will do it for him automatically by means of a time delay. This releases TASP for further switching approximately two minutes after the operator is connected to TASP.

Obviously, then, it is an advantage to have station operators manually keyboard the end of address code to release TASP. The time delay mechanism will hold the line in the circuit-selecting portion of TASP longer than if the disconnect code was sent manually.

AUXILIARY EQUIPMENT

In a station where large volumes of incoming traffic must be handled, the location can be equipped with additional Model 28 page printers. Although they all respond to the same call letters, the printers operate independently. The station can simultaneously receive as many messages as it has circuits. Thus, if a message comes in while one or more are being recorded, it will automatically be received by the next available circuit.

TASP

Communications System Features

FLEXIBILITY

Messages can be reproduced simultaneously at all desired receiving points.

SPEED

60, 75 or 100 words per minute.

ACCURACY

No chance of error; message is reproduced as sent.

PRIVACY

Only authorized agencies have access to message.

AVAILABILITY

Designed for continuous operation; no attendant necessary to receive message.

SIMPLICITY

Easy to operate.

LOW MAINTENANCE

Teletype equipment requires an absolute minimum of maintenance attention.

COMPATIBILITY

Circuits can be separately established for interstate operation.



Above, Model 28 automatic send-receive set. Top left send-receive page printer. At left, reperforator-transmitter distributor set.

Investigate what

TASP

can do for you . . . get in touch

with a Teletype applications engineer soon!

Teletype Corporation manufactures this equipment for the Bell System and others who require utmost reliability from their data communications systems.

For more information call or write:

TELETYPE[®]
CORPORATION • SUBSIDIARY OF Western Electric Company INC.

GENERAL OFFICES

5555 Touhy Avenue
Skokie, Illinois
Phones: ORchard 6-1000; Skokie
COrnelia 7-6700; Chicago
Direct Distance Dialing
Area Code 312

TWX: SKOK 3454
(After hours unattended service)

W.U. Services on premises

GOVERNMENT LIAISON OFFICE

425-13th Street, N.W.
Washington 4, D. C.
Phone: METropolitan 8-1016

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