

# EVOLUTION OF PABX ATTENDANT'S CONSOLES

by Jan Verhelst, Belgium

On a PABX, the operator's console or switchboard was always an important element in the call setup.

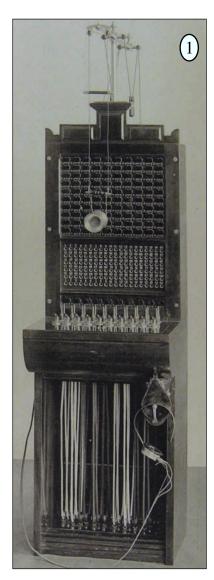
In the days of manual switching, the operator's console was really the core of the exchange: It was the exchange itself. Connections had to be setup and disconnected manually. A jack was inserted, and a switch was flipped to connect or disconnect a call. A disadvantage was the lack of privacy, as the operator could hear any conversation he or she wanted to hear.

The introduction of automatic switching has led to the expression "cuss less, girl less telephone." Call setup and disconnection could be done by the user. But the operator console remained important, especially for incoming calls which had to be forwarded to a local extension by an attendant. It's only by introducing DID (Direct In Dialing) in the 1980s that an operator was not required for incoming calls.

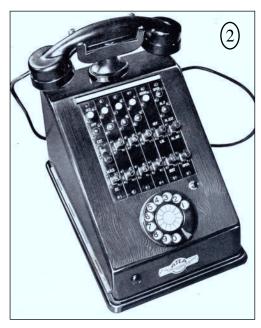
If you compare a user manual of an attendant's console of the 1930s and one of the 1980s, you can see that the basic features are more or less the same.

The basic features of an attendant console are:

- Accepting and forwarding incoming trunk calls
- Handling calls which could not reach their destination
- Set up an outgoing trunk call
- Intrusion in an existing conversation, i.e., to announce an urgent incoming call



Manual switch (first quarter 20th century)



1920/30's attendants console Housing: wood Technology: electro-mechanical

• Night service: all incoming calls are diverted to an extension (i.e. extension manned by security people).

Console details changes as technology, styling, and new material became available. For a few examples, see the pictures below.

Fig. 5 shows a GTD120 console from GTE Automatic Electric. The display shows the status for every local line with LEDs. The PABX contained a software controlled opto-

Continued on page 9.

## **PABX CONSOLES**

Continued from page 1



1950's attendants console Housing: metal

Technology: electro-mechanical



1968 attendants console Housing: metal/plastic

Technology: electro-mechanical, electronic



1976 attendants console (GTD120/1000)c Housing: plastic Technology: electronic

coupler for every line. For any of the 120 lines a separate wire had to be connected between the PABX and the console.

In Fig. 6 and Fig. 7 (systems of the 1980s) there was a datalink between the console and the PABX, so status changes were sent by means of messages. The 1986 console (see Fig. 7) was based on PC technology, so additional features

were available such as billing information for hotels, directory service etc.

Special attention (Fig. 8) has to be



1983 attendants console (OMNI PACET) Housing: metal/plastic Technology: electronic, software controlled via data-link



1986 attendants console on PC Housing: metal/plastic Technology: electronic, software controlled; additional features on PC



Attendant's console for visual handicapped operator (1980)

given to an attendant's console adapted for visually handicapped people. Lights were replaced by "tactiles," and visual messages by audible signals and a Braille display on a separate box. More details are in the Bonus Pages.

### **SPRINGFIELD**

Continued from page 4

 Days Inn
 217-234-8600

 Quality Inn & Suites
 217-235-0222

 Super 8
 217-235-8888

 Holiday Inn Express
 217-235-2060

#### **Weekend Schedule**

Friday: September 12

• 4:00 pm

Setup No Sales

Out of fairness to those who can't arrive until Saturday morning, we strongly request that no buying or selling take place then.

While the building does have an alarm system, we must advise anyone who sets up Friday that there will be **no overnight on-site security personnel.** 

• 6:00 pm

Break for dinner at the Golden Corral

• 7:30 pm - 9:30 pm Setup continues No sales

### Saturday: September 13

• 7:30 am

Doors open for a short setup period followed by lots of time to trade, sell, buy and learn.

• 10:00 am

Show opens to general public

• 11:00 am - 1:00 pm

There are plenty of good eating places in the area.

• 2:45 pm

Tear down

• 3:30 pm

Show closes

• 4:00 pm (about)

Dinner at Outback Steak House

• After dinner

Switcher's tour (see above)

**Sunday: September 14** 

• Breakfast at the Cracker Barrel in Mattoon

Time will be determined Saturday evening.

# In This Issue

### **Springfield Registration**

Page 2

#### The British Kiosk and "Lip Service"

by Gary Goff Page 7



#### A Visit to the Milton Kevnes **Telephone Museum**

by Remco Enthoven Page 9

#### **Bell System Postcards**

Page 21

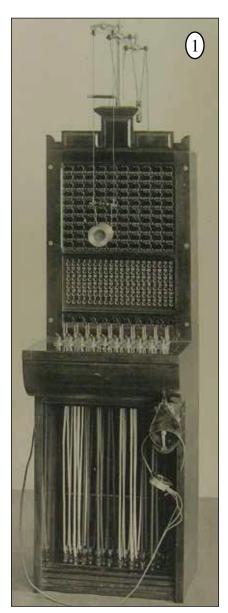


#### **April Phone of the Month: GTE Micro-Fone**

by Jan Verhelst, Belgium Page 22

# **EVOLUTION OF PABX** ATTENDANT'S CONSOLES

by Jan Verhelst, Belgium



We made the braille and tactile version, since it was required for our market. In several countries companies were encouraged to hire blind people, as they were getting some money from the government for that.

Since the standard GTE Automatic Electric console had messages and lights which could not be seen by visually handicapped people, we adapted the existing console.

#### A remarkable story about the "tactiles"

We had a problem with the first version of the "tactiles." Due to coil induction, the pin became hot when the "light" was switched on blinking. We measured the temperature, which seemed to be 75 degrees Celsius. And if you know that blind people are very sensitive at their fingertips, you understand this was really unacceptable.

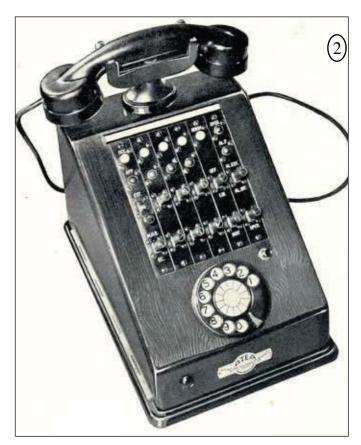
We complained to the Italian manufacturer, and he came back with two "solutions."

- 1) the person get's used to it (who will get used to such high temperature, probably a blacksmith!!)
- 2) they made a second version of the tactile, with some coating on it.

Finally that one seemed to work.

Manual switch (first quarter 20th century)

continued on page 3



1920/30's attendants console Housing: wood

Technology: electro-mechanical



1950's attendants console

Housing: metal

Technology: electro-mechanical

Page 3, TCI Singing Wires Bonus Pages, May 15, 2014



1968 attendants console Housing: metal/plastic

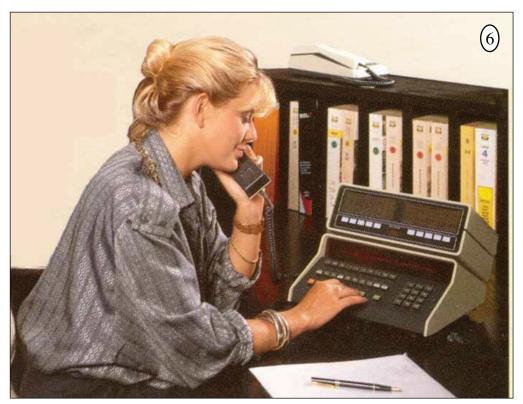
Technology: electro-mechanical, electronic



1976 attendants console (GTD120/1000)c

Housing: plastic Technology: electronic

Page 4, TCI Singing Wires Bonus Pages, May 15, 2014



1983 attendants console (OMNI PACET) Housing: metal/plastic Technology: electronic, software controlled via data-link



1986 attendants console on PC Housing: metal/plastic Technology: electronic, software controlled; additional features on PC

Page 5, TCI Singing Wires Bonus Pages, May 15, 2014



# **A SWITCHBOARD** FOR BLIND OPERATORS FROM GTE ATEA

Now the visually handicapped can operate even the biggest private exchange.

- All working keys have tactile as well as light indicators
- An audible signal warns the operators of incoming calls.
- The information on the visual display is repeated on a Braille reading strip.
- All the visual functions are maintained so that a sighted person can take over at any time.

Ask for more information and literature from

Mercure Centre (near Brussels National Airport) Raketstraat 100 1130 Brussels Tel. 02/7207160



Attendant's console for visual handicapped operator (1980)