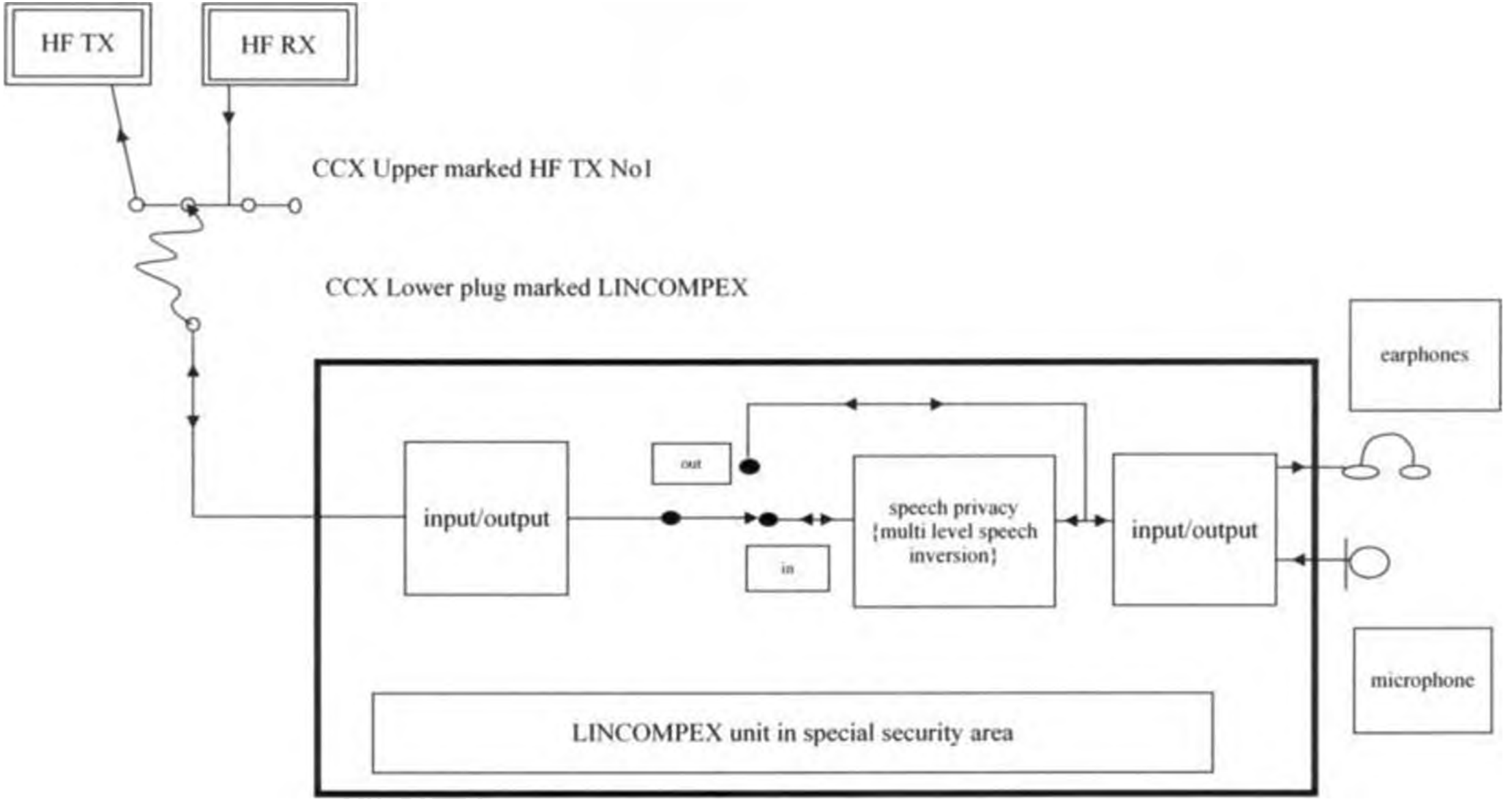
HF TX
HF RX
CCX Upper marked HF TX No1
CCX Lower plug marked LINCOMPEX
earphones
input/output
out
in
speech privacy
{multi level speech
inversion}
input/output
microphone
LINCOMPEX unit in special security area

Application of LINCOMPEX Equipment to Typical Radio Transmission Terminals

The transmit and receive constant volume amplifier and anti-singing unit functions are inherently performed by LINCOMPEX action so that all such units (VOGAD and VODAS) may be dispensed with when conversion to LINCOMPEX operation takes place.

It will, however, be necessary to ensure that echo suppression requirements are covered by suitable units placed at the 4-wire exchange end of the route on the radio terminal rack itself, or mounted at the toll office.

It is recommended that far end operated half echo suppressors (STC type ES-71A) be employed for new installations.

A typical conventional radio telephone terminal block schematic diagram (omitting control and monitor functions) is shown in Figure 3. Figure 4 shows the terminal fitted for LINCOMPEX operation.

It will be seen that Privacy Equipment input and output points are taken directly to the LINCOMPEX units and provision is made for switching privacy in or out of circuit, from a remote control point, by application of an earth to a control wire. Automatic compensation is provided for the privacy speech path delay by internal delay line switching.

LINCOMPEX Units will accept standard 1000 Hz/20 Hz and 500 Hz/20 Hz ringing tones and also dialling waveforms for through transmission.

It is expected that the degree of monitoring and manual control required on LINCOMPEX radio terminals will decrease as experience of this mode of operation grows. No frequency adjustment of manual sensitivity controls will now be necessary and the removal of function keys associated with VODAS and VOGAD units will introduce further simplifications.

LINCOMPEX transmit and receive shelves each mount shelf contained power units so that segregated operation is possible, in conjunction with suitable band displacer units, at separate transmitter and receiver sites.

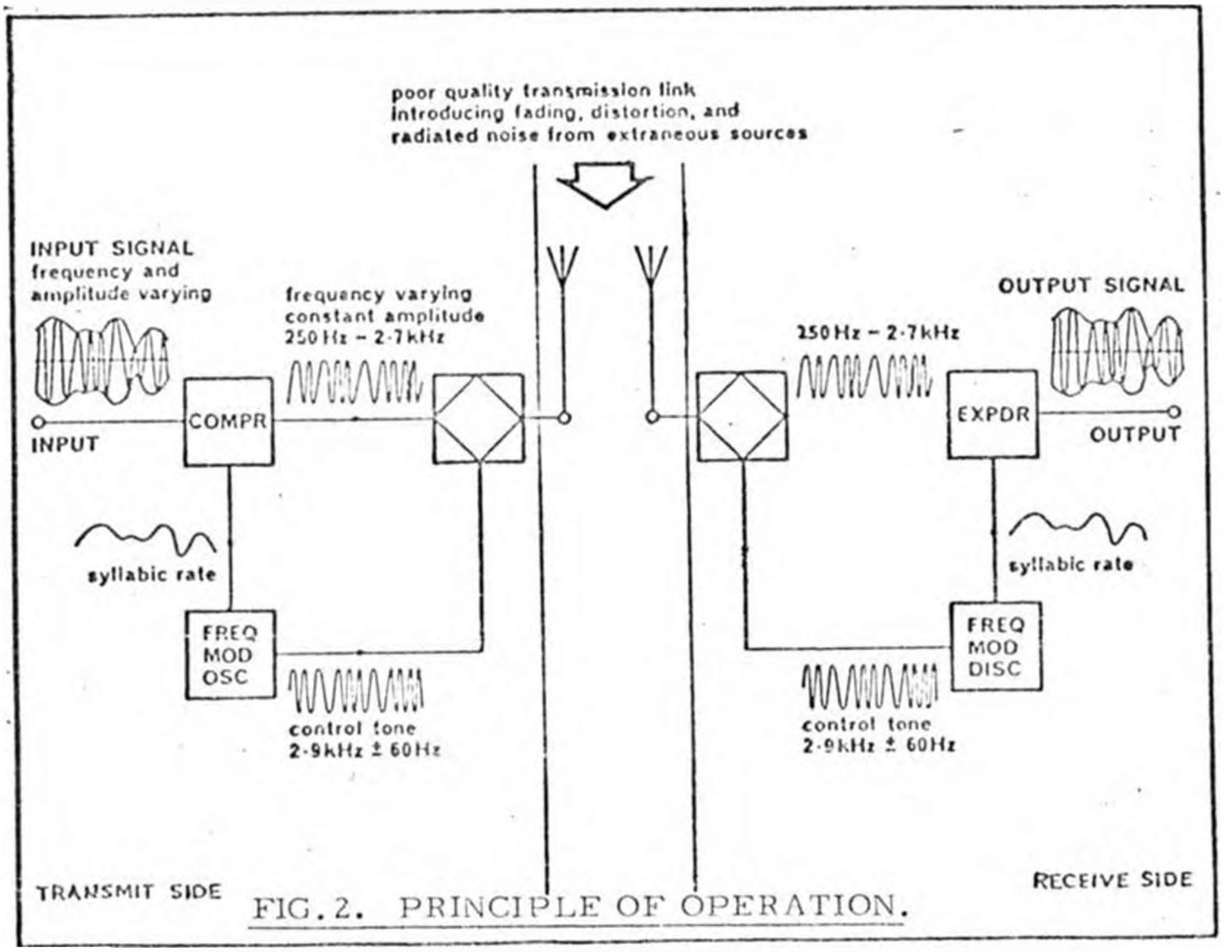

FIG. 2. PRINCIPLE OF OPERATION.

692
CUJ
3 SKS
1 SKG
692
CUJ
3 SKS
1 SKG
JB
JB
JB
JB
UHF ROOM
24 V
BID
150
BID
150
24 V
POWER SUPPLY No 1
POWER SUPPLY No 2
115 Va.c. VIA ISOLATING TRANSFORMER
115 Va.c. VIA ISOLATING TRANSFORMER
DIST PANEL No 1
DIST PANEL No 2
BAY 6
MCO
KKA No 1
KKA No 2
COMMS DESK EWO
LOPO OPS ROOM
TOI BRIDGE
TOI OPS ROOM