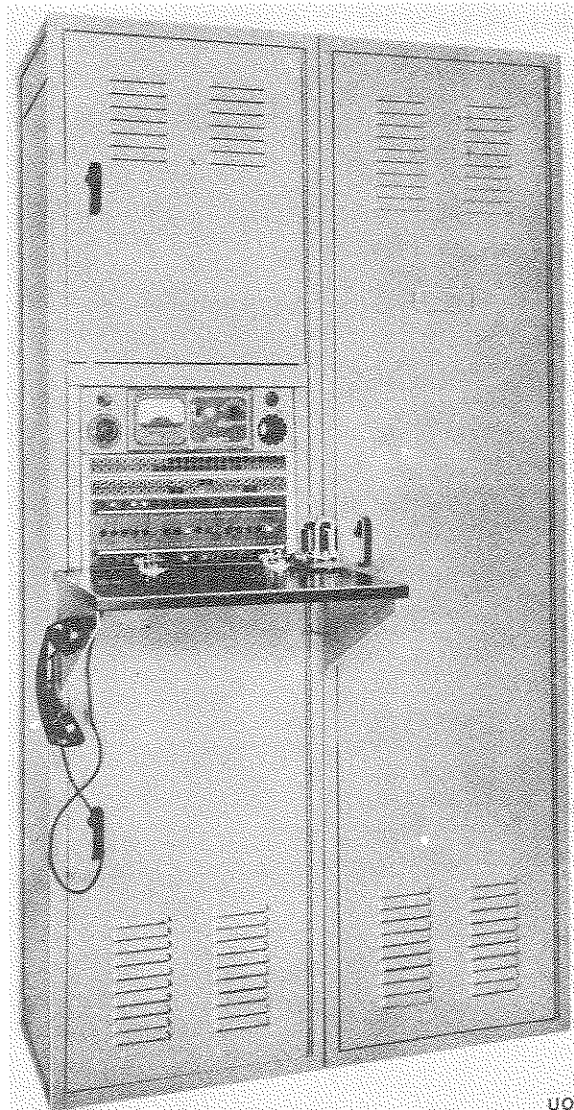


STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 May 52

AN/FRA-TYPE

SERVICE TYPE NUMBER: UO
VOICE CONTROL AND SPEECH PRIVACY EQUIPMENT



Voice Control and Speech Privacy Equipment UO is terminal equipment used to connect four-wire radiotelephone transmitter and receiver circuits to normal two-wire telephone plant. It also provides speech scrambling and unscrambling to prevent unauthorized listening-in on radiotelephone circuits.

This equipment includes channel shifter and restorer circuits, which by shifting one voice channel of a single side band, twin-channel, radiotelephone circuit, provides a means of reducing crosstalk between the two channels.

Radio noise is effectively reduced by voice operated, gain-controlled amplifiers, which raise speech waves to all telephone stations to the same volume level, and by a noise reducer which attenuates noise signals during intervals between speech syllables or words.

It is housed in six 19-inch relay cabinets and provides for one-channel operation.

Several of the components will accommodate two- or four-channels and are not required on a one-for-one basis, for multichannel operation.

AN/FRA-TYPE		INSTRUCTION LITERATURE: W E Co. Nos. 1,114 through 1,121, 1,128
UO	:SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT:Unclassified
VOICE CONTROL AND SPEECH PRIVACY EQUIPMENT		USING SERVICE : Navy DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
*	Control Terminal CW-23592 (Control Bay)	84 x 22-1/4 x 17	Not Available
*	Control Terminal CW-23594 (Auxiliary Bay)	84 x 22-1/4 x 17	" "
***	Privacy System CW-50293 (Common Bay)	84 x 22-1/4 x 17	" "
*	Privacy System CW-50295 (Channel Bay)	84 x 22-1/4 x 17	" "
**	Channel Shifter Bay CW-50296	84 x 22-1/4 x 17	" "
**	Vogad Bay CW-50299	84 x 22-1/4 x 17	" "

* (1) per channel.

** (1) per twin channel.

*** (1) per four channels.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: This is auxiliary signal modifying apparatus used in conjunction with primary communication equipment.

TECHNICAL CHARACTERISTICSFREQUENCY RANGE: 250 - 3,000 cps, or
2,250 - 5,000 cps (channel shifted).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: +7 to +12 volume units.

POWER REQUIREMENTS: 1,500 w, 105-125 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Voice Control and Speech Privacy Equipment UO measures 84 x 133-1/2 x 17 inches.