Colonel Klepinger had received a copy of a letter addressed to the Director of Intelligence, concerning these Military Characteristics. Army Field Forces wish to modify these Military Characteristics to a considerable extent. They did not concur or nonconcur because of their exceptions.
**Compo List of Various Military Characteristics for Cryptologic Devices**

1. (2) Manifold transmission channels to accommodate simultaneous facsimile, voice, and auto-keyed signals
2. (3) Provide a continuously enciphered signal
3. (4) Possess a specified degree of security
4. (5) Obviate need for paraphrasing and stereotyping
5. (6) Obviate need for message indicator systems and burying of address and signatures
6. (7) Provide automatic synchronism between stations regardless of transmission means
7. (8) In the form of fixed plant terminal equipment
8. (9) Will not reduce the efficiency of any transmission system with which used
9. (10) Require no special handling or preparation of text to be transmitted
10. (a) Speed consistent with transmission means with which employed
     b Higher speed than previous devices for same purpose
     c Operating speed of WPM
     (1) Automatic (2) Semi-automatic (3) Manual
11. (11) Operate from
     a 115/230 v 50/60 c/s AC
     b 115 v DC
     c 24 v DC
     d standard aircraft power
     e battery
12. (12) Handle messages of all classifications
13. (13) Complete change of key and check within minutes
14. (14) Provide page copy
15. (15) Provide printed tape copy
16. (16) Capable of operating on-line and off-line
17. (17) Provide direct encryption of numerals
18. (18) Simple in construction and operation, thereby requiring minimum of training
19. (19) Operate with
     a Normal teletypewriter equipment
     b Lightweight field teletypewriter

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*36.*
(20) Communicable with
   a  Equivalent ground force equipment
   b  "    air force equipment
   c

(21) Operable over
   a  Standard types of wire and radio signal communication equipment
   b  Aircraft liaison radio systems

(22) Messages can be automatically deciphered upon receipt, with plain text being printed at both transmitting and receiving terminals

(23) Simple indicator system for use with each message

(24) Keyboard operated

(25) Capture by enemy will not adversely affect subsequent transmissions

(26) Constant change of indicators not required

(27) Manual operations held to minimum

(28) Suitable for tandem operation to furnish "break-back" check copy

(29) Capable of continuous operation over extended periods

(30) In case of equipment failure, transmission may be continued by CW

(31) Accept clear speech and reproduce same undistorted

(32) Signal not unduly affected by interference and atmospherics

(33) Key variable produced without use of tool

(34) Give clear warning when transmitting in the clear

(35) Means provided for destruction of specific key and component parts

(36) Operate with standard trans radio sets and wire telephone equipment having trans band width of 3000 cycles per second without modification of either

(37) Provide for multi-net operation

(38) Multi-subscriber operation off one terminal

(39) No loss in transmission range in the circuit being used

(40) Not require close control of ambient temperature

(41) Can be installed and operated in any shelter suitable for other comparable communications equipment

(42) Not require more skill to maintain and operate than standard radio equipment
(43) Integral part of aircraft command radio equipment

(44) Operate from standard microphone

(45) Not require constant control of synchronization

(46) Usable for point-to-point low echelon voice traffic

(47) No lag between time of reception and time of transmission

(48) Transmission of a pictorial picture which requires no longer than transmission in the clear

(49) Will produce black and white or halftone copy

(50) Use of photographic negatives as receiving element as well as graphite-backed paper

(51) Will handle picture of specified size

(52) Provide for multiple reception at stations capable of phrasing with the transmitting equipment

(53) Exact reproduction of original material

(54) Cryptographic element simple enough to be handled by code-room personnel

(55) Transmit over normal voice circuits in liaison set

(56) Operate as ancillary equipment