



RACE: Rapid Automatic Cryptographic Equipment

The **RACE** was manufactured by *Standard Telefon og Kabelfabrik A/S* a Norwegian company in the late 1980's. It was one of two European crypto machines, the other being the Dutch Aroflex, which was bought in a limited number by the department to be used as a portable cipher machine that could be easily transported and used in the field. The Aroflex ended up being the machine that we used the most. The RACE was only used in a number of limited engagements during some of the NATO exercises that we conducted during those years. RACE was designed for off-line encryption and decryption of messages and was designed to meet NATO security and operational requirements. The Cryptographic fill was entered using strip of paper tape entering a daily Algorithm used to encrypt the plaintext message. As with Aroflex the plaintext was converted into five letters groups with 10 groups per line, automatic paging, using ACP 127. (Allied Communications Publication). It has a built in 12,000 character storage and a 20-character display for message editing. With its rugged design, plug in modules for quick repair in the field and its 18KG weight it was an ideal cipher machine to be used on the road. As one can see from the plaintext and encrypted sample shown below the end product looked like an Aroflex message.



NATO CONFIDENTIAL

R 051150Z DEC
 FM CHOD NORWAY
 TO SACEUR
 INFO CINCNORTH

BT

SUBJ CRYPTO TRAINING COURSE

1. FOLLOWING PERSONNEL WILL ATTEND COURSE NO 28/78

LTN K ANDERSEN ID NO 200346324

LTN R E LUNDBY ID NO 120145386

SGT J P SMIDT ID NO 150758903

ALL CLEARED NATO SECRET AND CRYPTO

2. ACCOMMODATION ARRANGED

BT



RR RXFPH RXFNBCR
 DE RYFIAC 0133 3391350
 ZNR UUUUU
 R 051245Z DEC
 GR(SB)

BT
 DRUHV PARAL PARAL PARAL PARAL PARAL UUPBP JVSTL CVJAL XUXFL
 KJDAE GJLLV CIVJA UXFQQ XAAAQ OROXS OAKUE IVMSG ZYNLO OZBFS
 IPGXM XGWRG ORPPY ADGHQ EZDMY QHJQS HDBVB PPEJE REKJD VQBYG
 MCKFU MUVLT XHAWA ZBILJ OVMHJ WYFVZ VKOTJ KOBUJ SGGRD VBBPZ
 SYPYV DCWVR FCASM IHUEC UDFNX WRGWV EAJZB UYBDV XMDMG OZJGV
 HJBYP ABOLE AZVSN ISCCD WYVKV SGXSN IJQFC TISFO KHMNJ FDUFO
 PCONA STUKN VFDIE IFTXP IRDQX EBTJM LJNAA BYPKK TKWBX WOVMD
 LGVLP DOGIH LEMYJ HANZB DRUHV

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