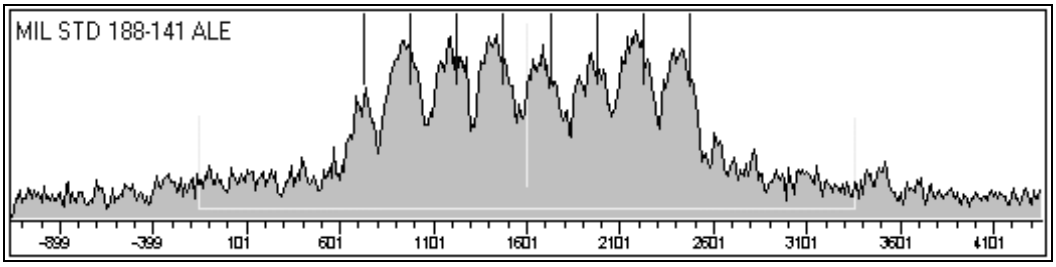
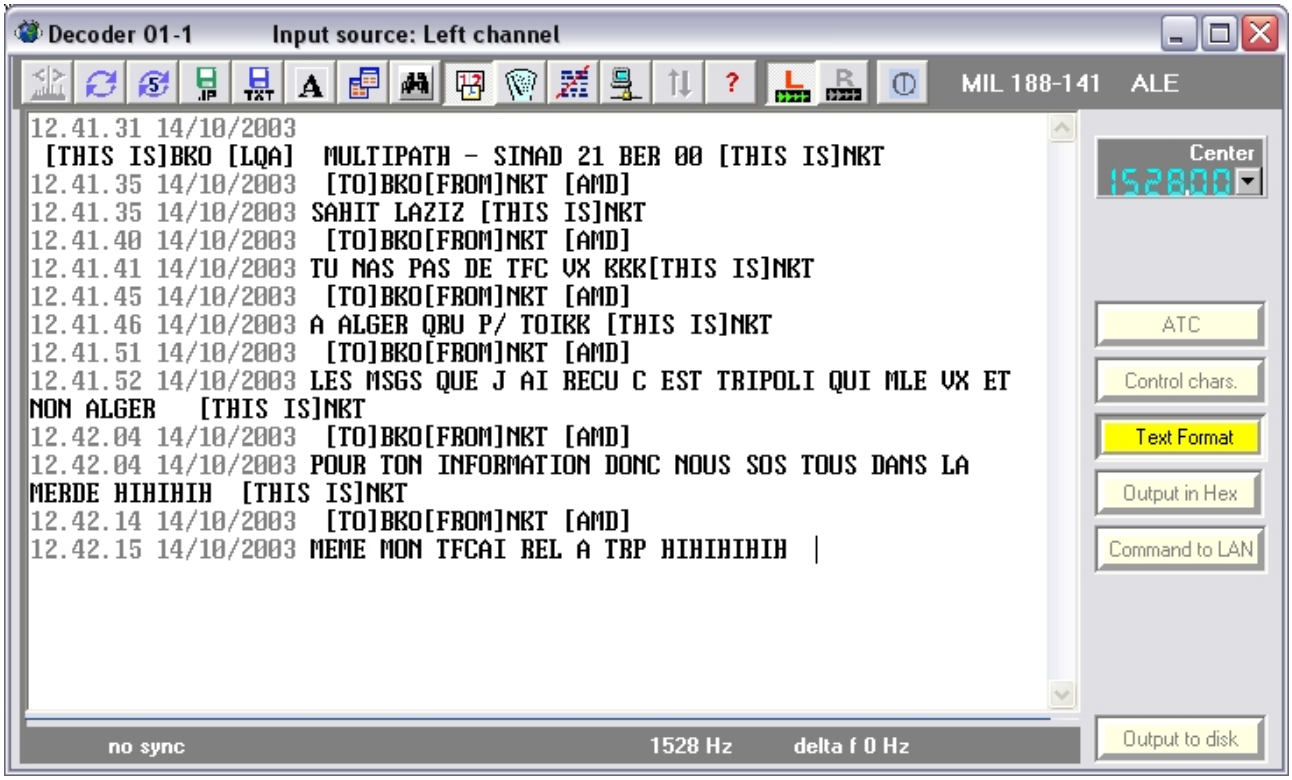
MIL 188-141 A

Ale (Automatic Link Establishment)

This system allows to automate the process of setting up a circuit on HF achieving a high percentage of first time link-up. The ALE controller (Automatic Link Establishment) system Mil Std 188-141A is designed to establish one to one/one to many links and once the link is is established the controller has the option of passing data in a low speed manner using its internal provisions. Alternatively it may be switched manually or automatically to a different modem for high speed FSK-PSK data, or voice.



It's waveform is designed to pass through the AF passband of standard SSB equipment. It consists of 8 tones (MFSK) located on 750 - 1000 - 1250 - 1500 1750 - 2000 - 2250 - 2500 Hz. Each tone is 8mS in duration. This gives 125 symbols per second. With 8 tones (symbols or elements) we can support 3 data bits per symbol. This results in a transmitted data rate of 375 bits per second.



MIL 188-141 A "ALE" – in this picture an example of a French station