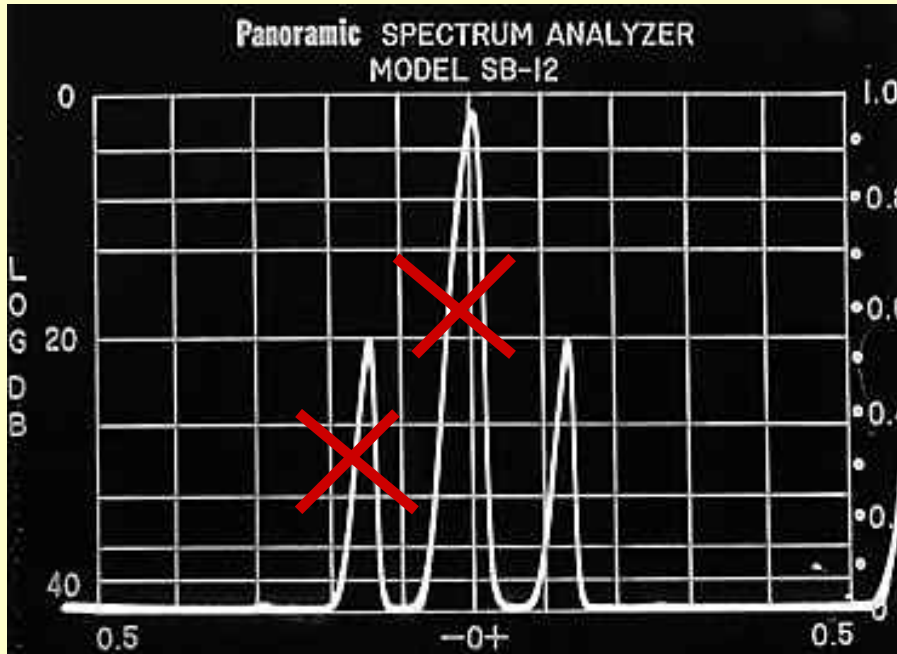


AM and SSB

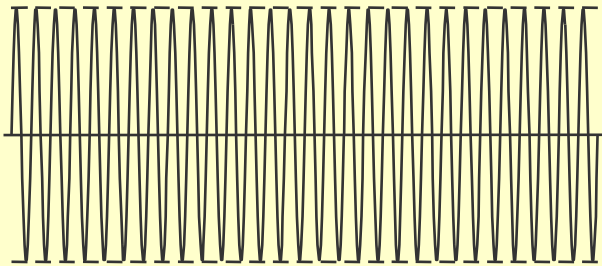


The carrier contains no audio information.

The sidebands contain duplicate audio information

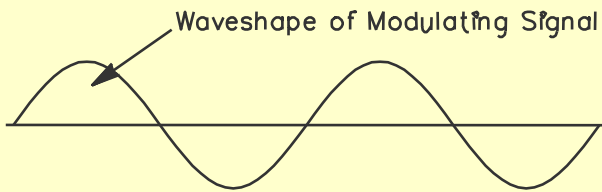
By filtering out the carrier and one sideband, we save spectrum and concentrate our RF energy into a narrower bandwidth. SSB is therefore more efficient.

Frequency Modulation (FM)



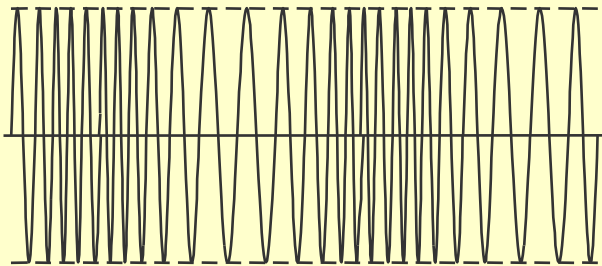
(A)

Unmodulated carrier, full power at all times



(B)

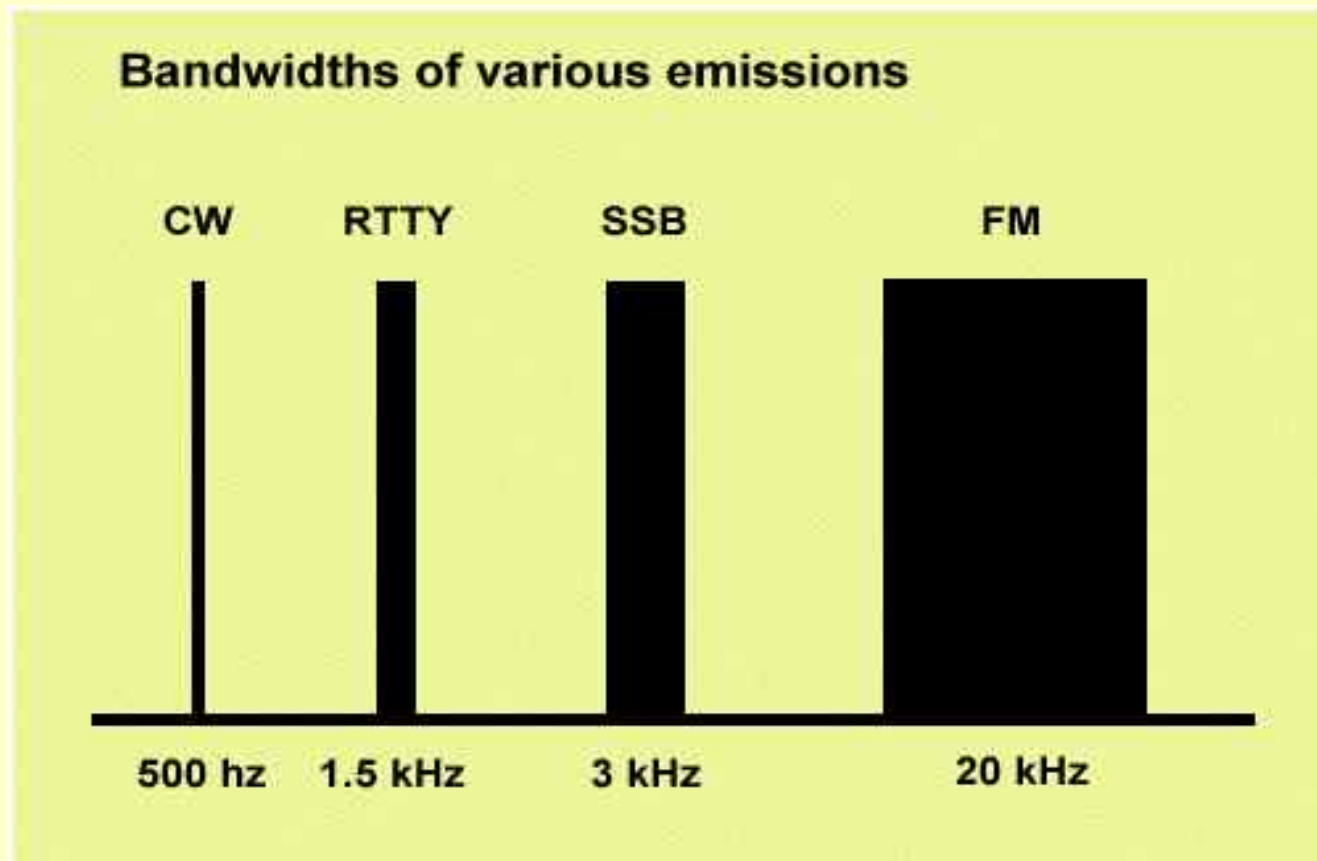
Waveform of modulating signal



(C)

Modulated carrier with frequency deviation and constant amplitude

Bandwidth



SSB Signal

2 - 3 kHz wide

FM Signal

10 - 20 kHz wide

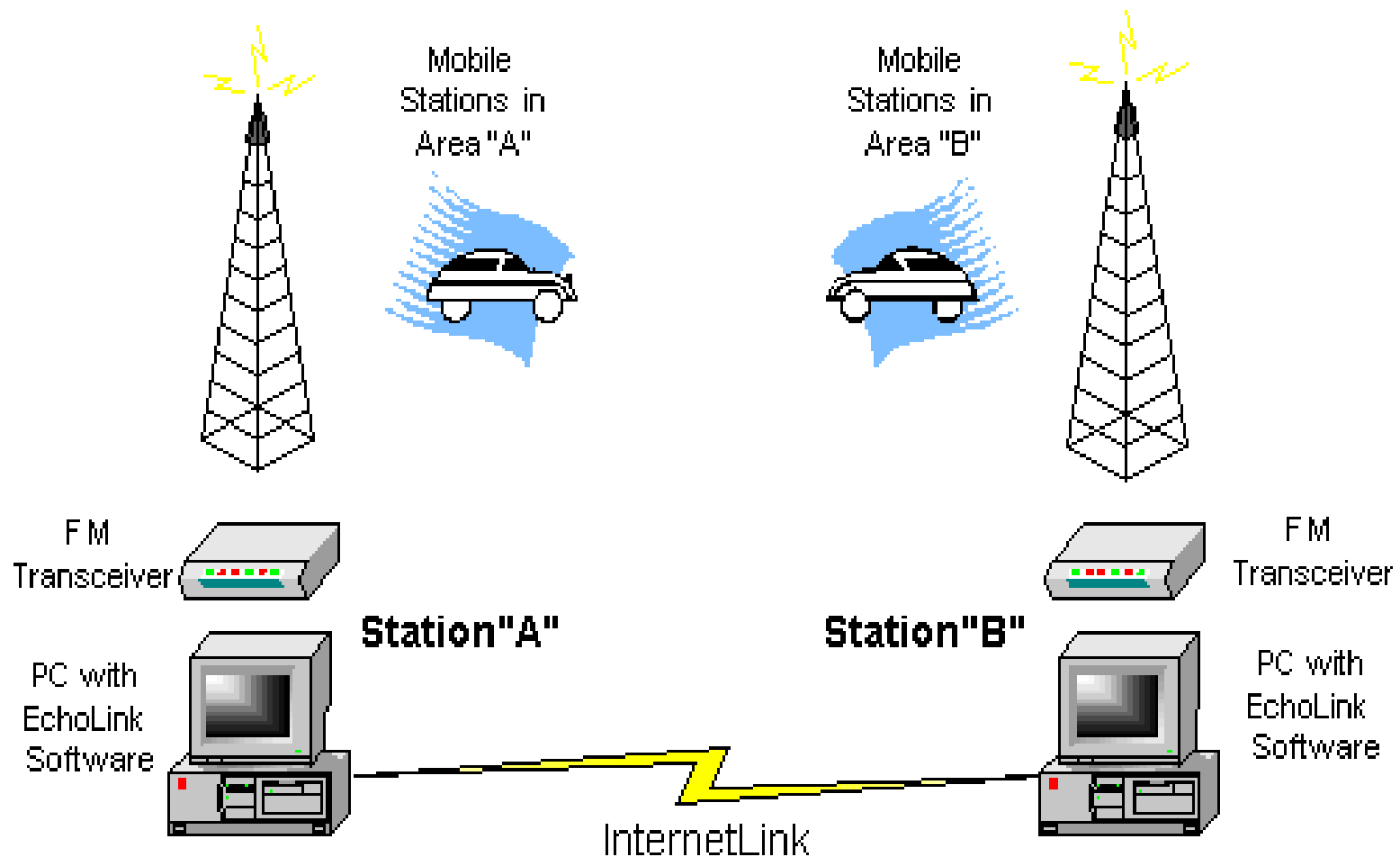
UHF Fast-Scan TV

~ 6 MHz

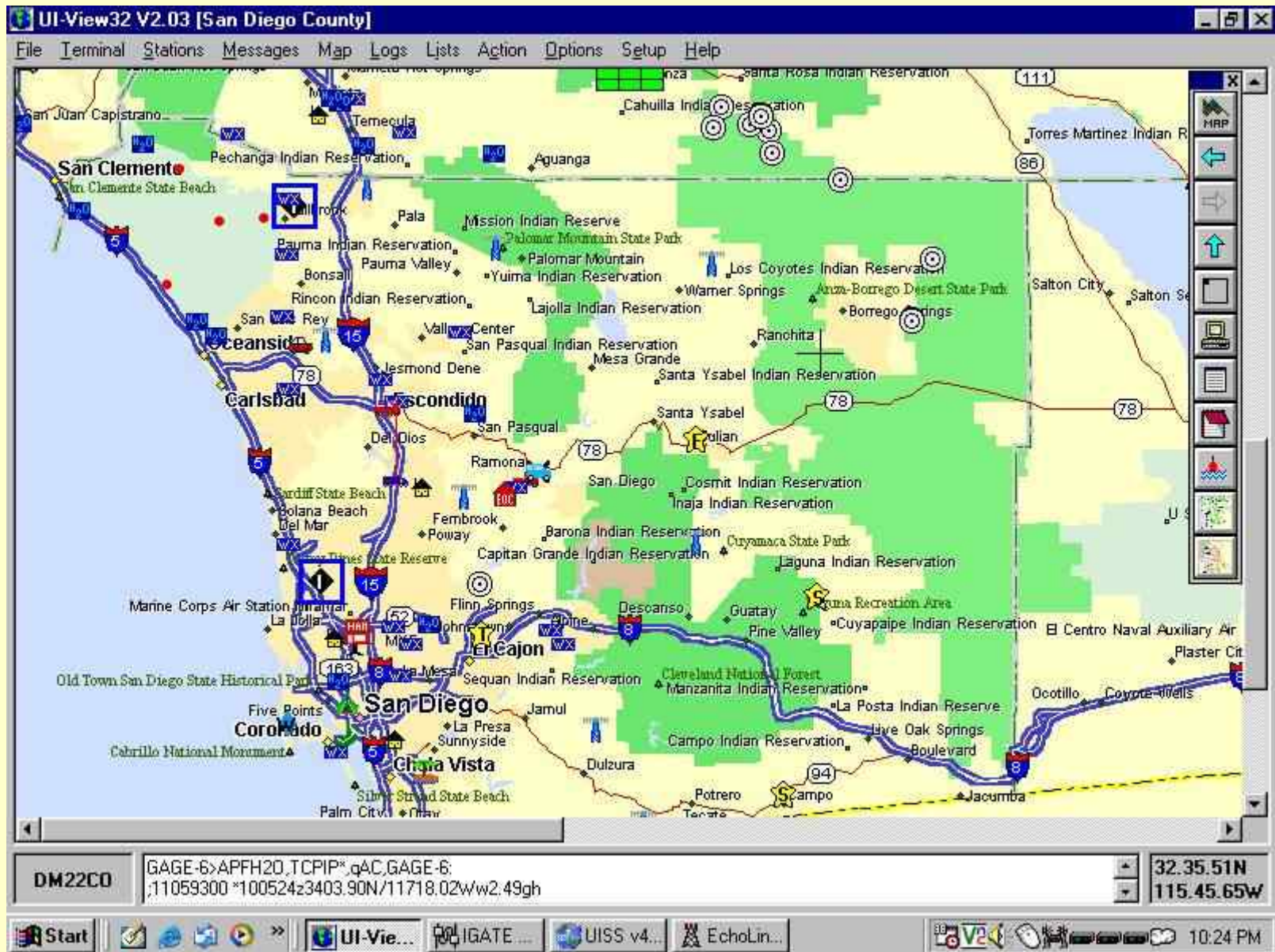
EchoLink

(uses Voice Over Internet Protocol, VOIP)

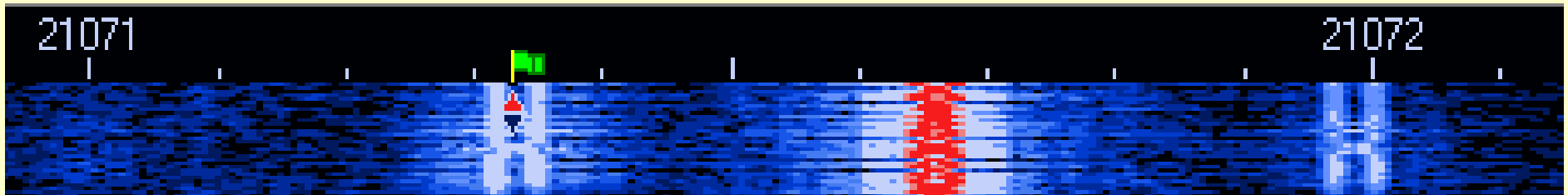
Linking Example



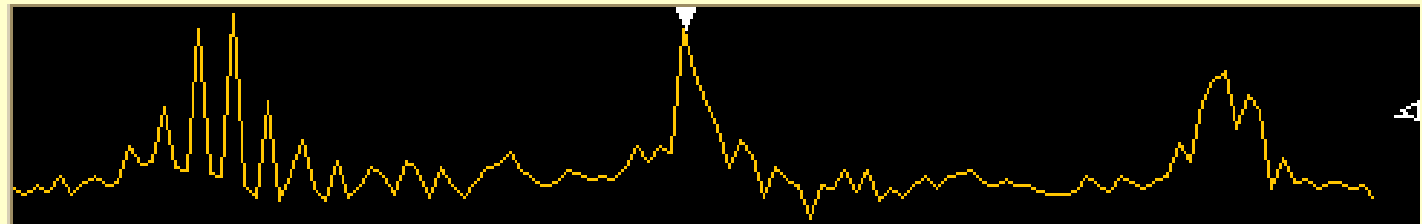
Automatic Position Reporting System (APRS)



PSK31 Digital Mode



?



Provides VERY EFFICIENT keyboard to keyboard chat capability.
PSK31 is not error-corrected.

Ham Q-Signals Commonly Used On VHF Repeaters

Q signal	Question ?	Answer, Advise, or Order
QRM	Are you being interfered with? Do you have interference	I am being interfered with.
QRN	Are you troubled by static?	I am troubled by static.
QRP	Shall I decrease power?	Decrease power (commonly a Low Power Station)
QRT	Shall I stop sending?	Stop sending (Shutting Down)
QSL	Can you acknowledge receipt? Common usage - Did you get that OK?	I am acknowledging receipt. Common usage -- Yes I understand, Roger
QSO	Can you communicate with ... direct or by relay?	I can communicate with ... Common usage -- A 2-Way Contact.
QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency (or on ... khz (or Mhz).
QTH	Where are you located?	My position is ... Common usage - Your location mobile or home