Filter Considerations: *(Outline:)*

Specail Note:
> ***Since Filters involve Reactive Components, it would be well to discuss that aspect early.***

Applications:
    Power Supplies
            Removing the AC Component
            Ripple Reduction
    Audio Circuits
            Base Control
            Treble Control
            Hiss Reduction
            Pass-Over-Unit" for Speakers
    Receivers (RF)
            Tuning
            IF Transformers"
    Transmitters
            Carrier Generation
            Sideband Control
    Oscillators
            Audio (Tone)
            VFO
            BFO
            MO
    Analysis
            Spectral Analysis
            Missile Telemetry
              (Frequency and Energy Subjected to Missile Payloads)

General Types:
    Low-Pass
    High-Pass
    Bandpass
    Notch (Bandpass-Reject)

Configuration:
    L-Type
    T-Type
    Pi-Type
    Unbalanced
    Balanced

Uses:
    Signal Pass (Desired Signal)
    Signal Block (Undesired Signal)

Terminology:
    Bandwidth
    "Q"
    Tuneable
    Signal Loss
    Quality Degredation
    Resonant

<u>Special Consideratioons:</u>
    Gamma-Match
    Hairpin Tuning
    Shorted Quarter-Wave Stub

<u>Components:</u>
    Inductors
        Solid-Iron-Core
        Powdered Iron-Core
        Air-Core
        Transformer-Coupled
    Capacitors (Elecrolytic and Non-Electrolytic)
    Resistance

<u>Special Types:</u>
    mDerived
    Constant-K
    Bessel
    Butterworth
    Tracking Filter