



I Passed my General/Extra  
Class License and now  
I'm **READY** to buy  
My **FIRST** HF Radio!

*Tom Yenny, P.E. – K5LOL*



***What should I buy for my first HF Radio?***

***What should I buy for my first car?***

***“Temet Nosce”***



## What do you want to do with YOUR HF Radio?

Voice?

CW?

Digital?

Rag Chewing?

Contesting?

Schedules?

Nets?

DX Chasing?

Fixed Station, Mobile, Portable?

QRP?

High Power?

Radio or Rotor Control?

Satellite Work?



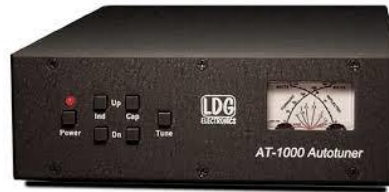
# Typical “Component” Station



Power Supply



HF (10-160)



Tuner



6 Meter



70cm/2M



# Typical “Integrated” Station



**Power Supply**



**HF (10-160)**

**6 Meter**

**2m/70cm**

**1.2GHz**

**Antenna Tuner**

***“DC to Daylight”***



## *Tom's Scorecard*

**Component Vs. Integrated**

**Cost**

**X**

**Space**

**X**

**Power**

**X**

**Upgradeability**

**X**

**Performance**

**X**

**Availability**

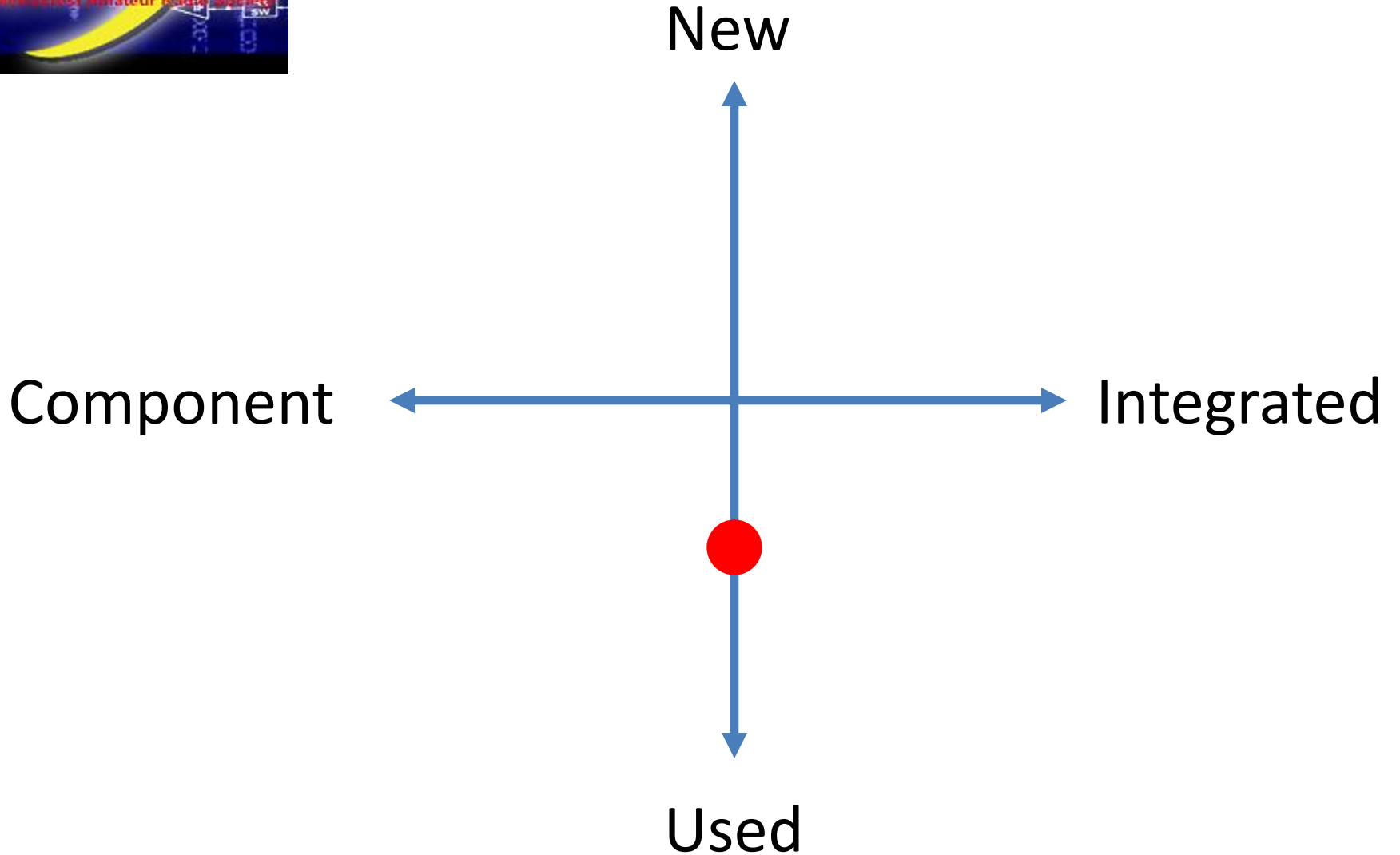
**X**



*So there is another aspect to  
Radio selection.....*

## Full Size Vs. Compact









# Let's Talk About 3 Key Features:

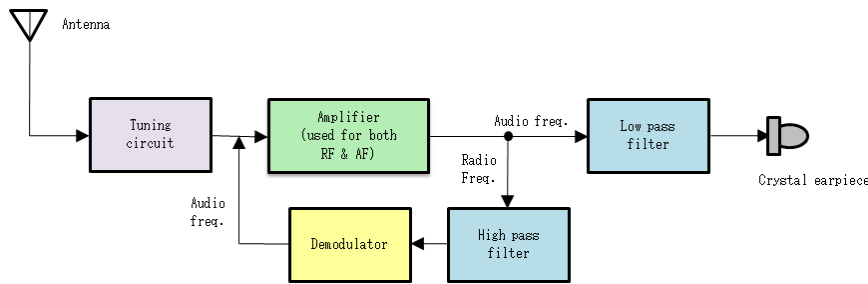
**Filters**

**Receivers**

**Serial Interfaces**



## To Receive or Not To Receive....



RIT

XIT

DSP

Noise Reduction

IF Filter

Notch Filter

Noise Blanker

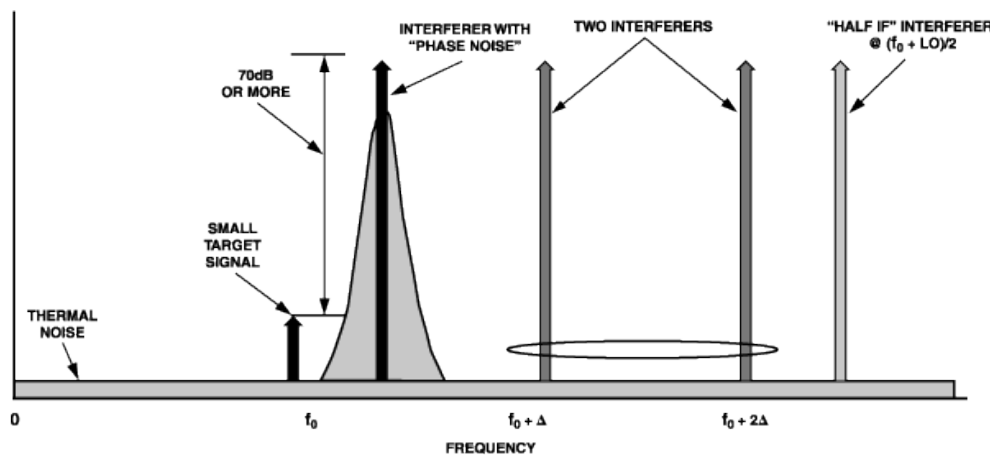
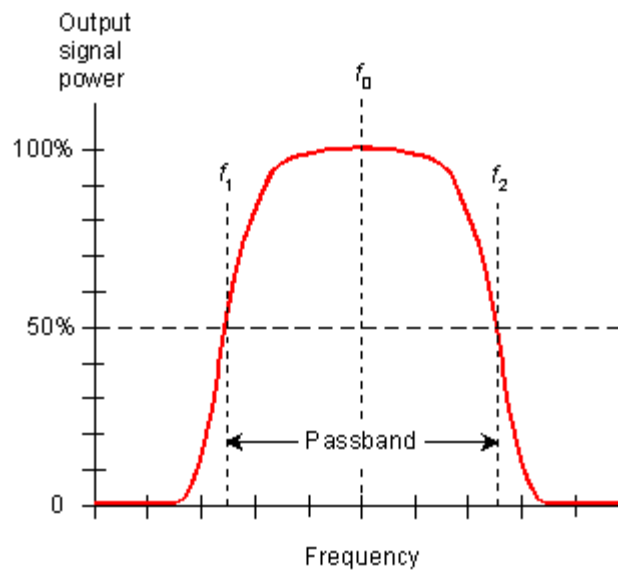
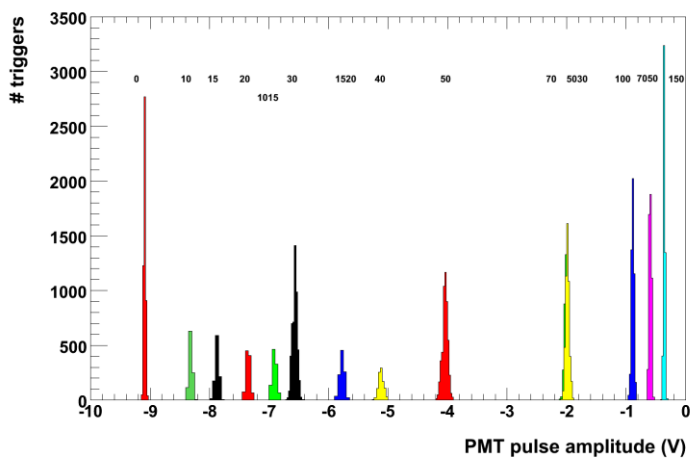
Clarifier

Passband



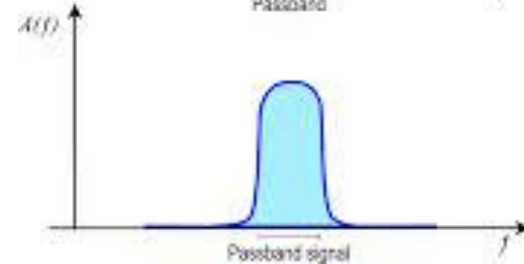
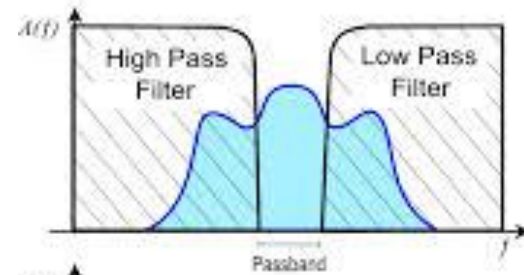
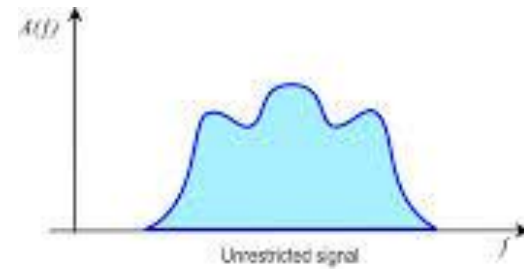
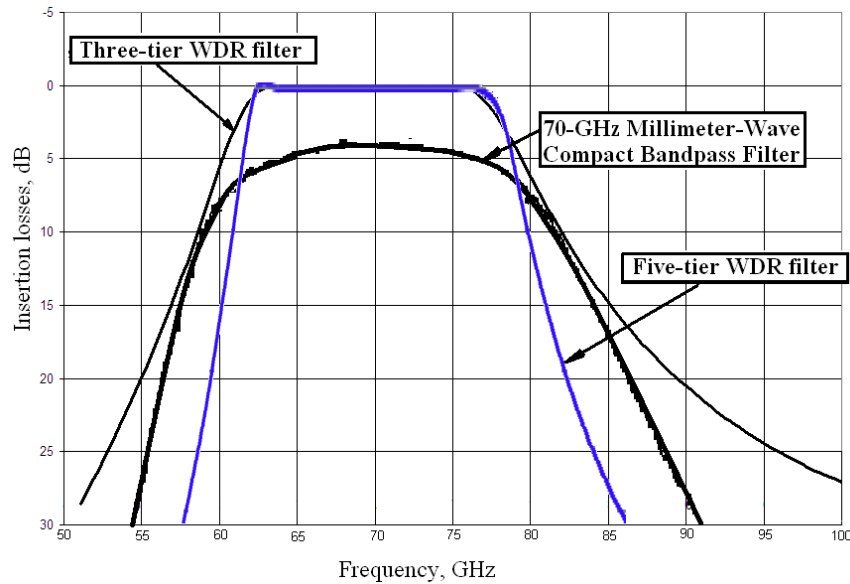
# So what is an Analog Filter?

PMT signal amplitude from scope with neutral density filters





# So what is what is Digital Signal Processing and why should I care?





## *Two Receive or Not Two Receive... Why would I need two receivers?*

**There are at least two use cases:**

- Contesting
- Working DX/DXPeditions

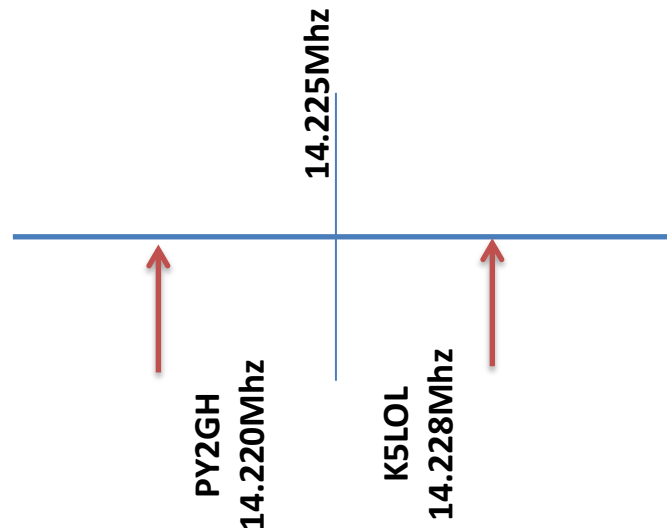




## *What is RIT/XIT?*

Receiver Incremental Tuning  
Transmitter Incremental Tuning

Typically about 10KHz





# *Radios and Computers A Marriage Made in Heaven*



- Computer Control
- Logging
- Rotor Control
- Digital
- Memory Programming



## *Ham Radio Deluxe*



## *What About Software Defined Radios?*



*Is this a good "First HF Radio"?*







## *Too many choices? AHHHHH!*

- Decide what you want to do with your HF Radio
- Talk with other HF operators to and ask them what they like or dislike about their radio(s)
- Leverage the reviews on eHam.net (~370 Reviews of HF Radios on eHam!)
- Operate at as many events as you can like Field Day where you can get some “hands on” experience
- Make yourself a spreadsheet







## *Don't "Sweat" Your Decision Too Much.....*

**Within Two Years, most new HF Operators will want to either add to their first HF radio "station" OR they will want to replace what they initially purchased.**



***What does Tom recommend  
For a First HF Radio?  
FOR TOM!***



# And The Winners Are:

(i.e. Tom's Fav's for First HF Radios)

(All are current production radios)

**Base Station**



**Kenwood TS-590S**

**Mobile**



**Yaesu FT-857D**

**Portable**



**Icom IC-7200**



# Let's Look At Some Software and Radios!