

# **Preamps and Converters**

**TV accessories 1947-1967**

# Ham preamp and converter from the 1950s



Millen "R9er"  
preamp

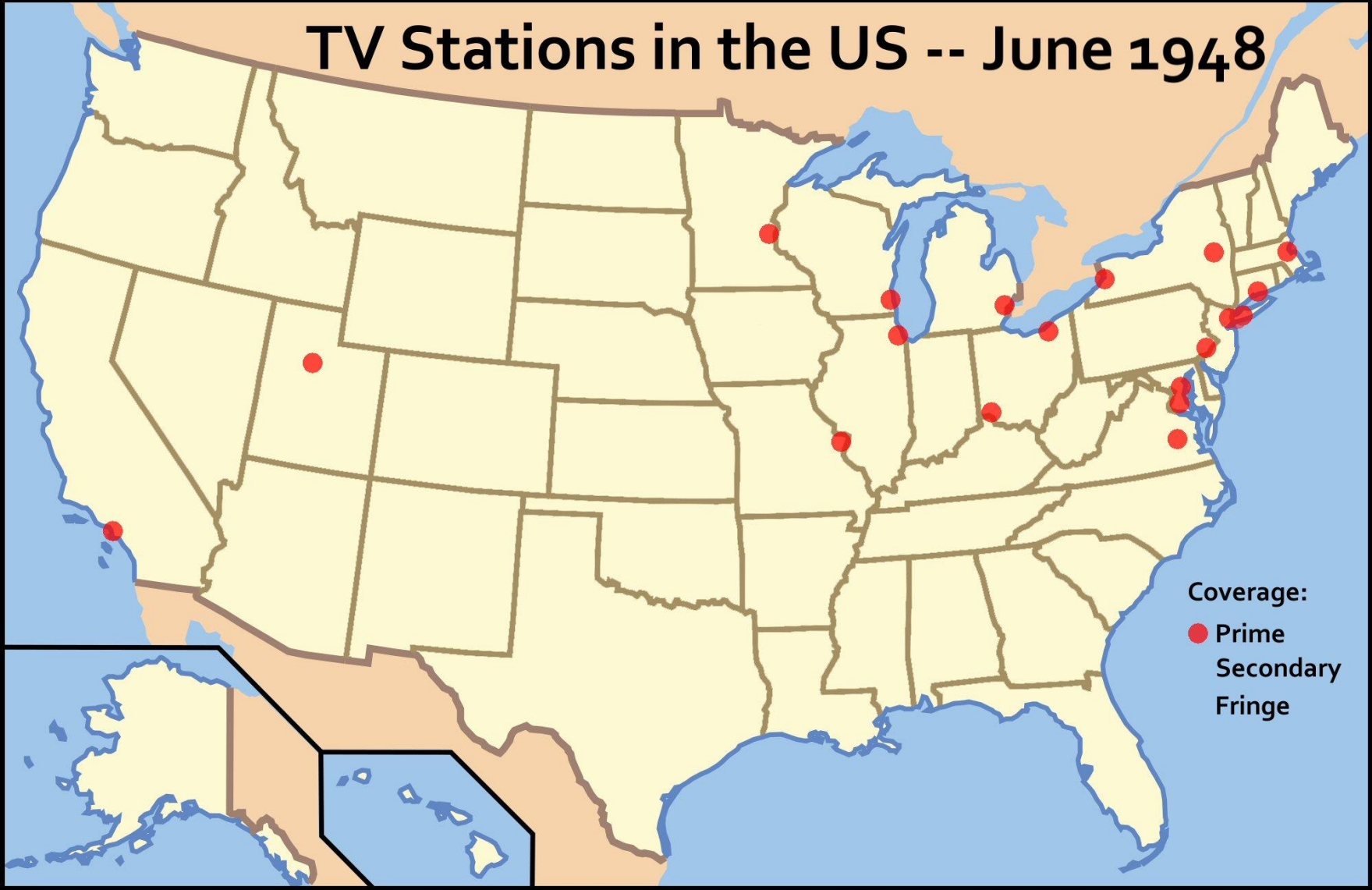
RME "VHF-152A"  
converter



# A Variety of TV Signal Boosters

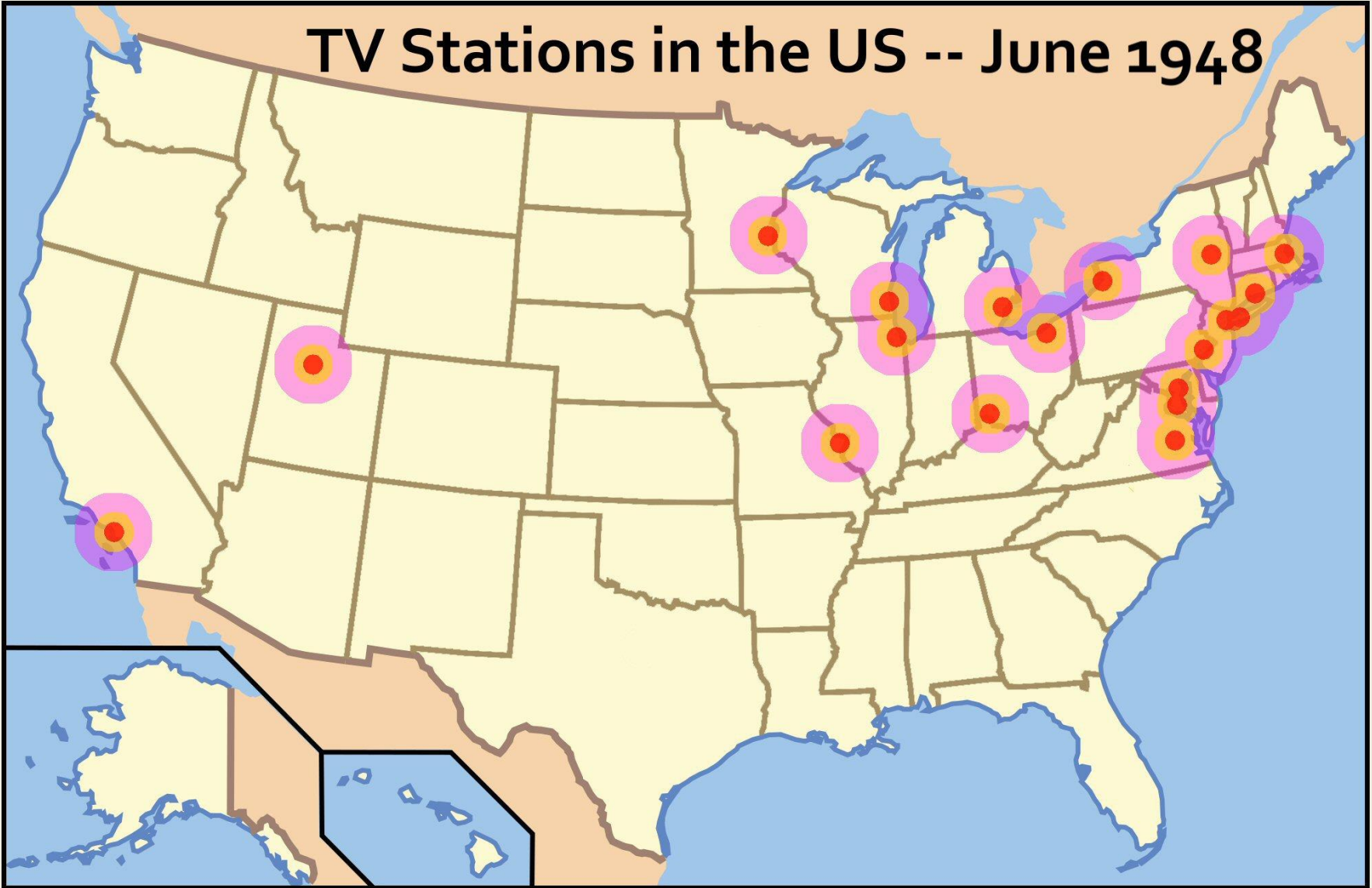


# TV Stations in the US -- June 1948



Prime Coverage

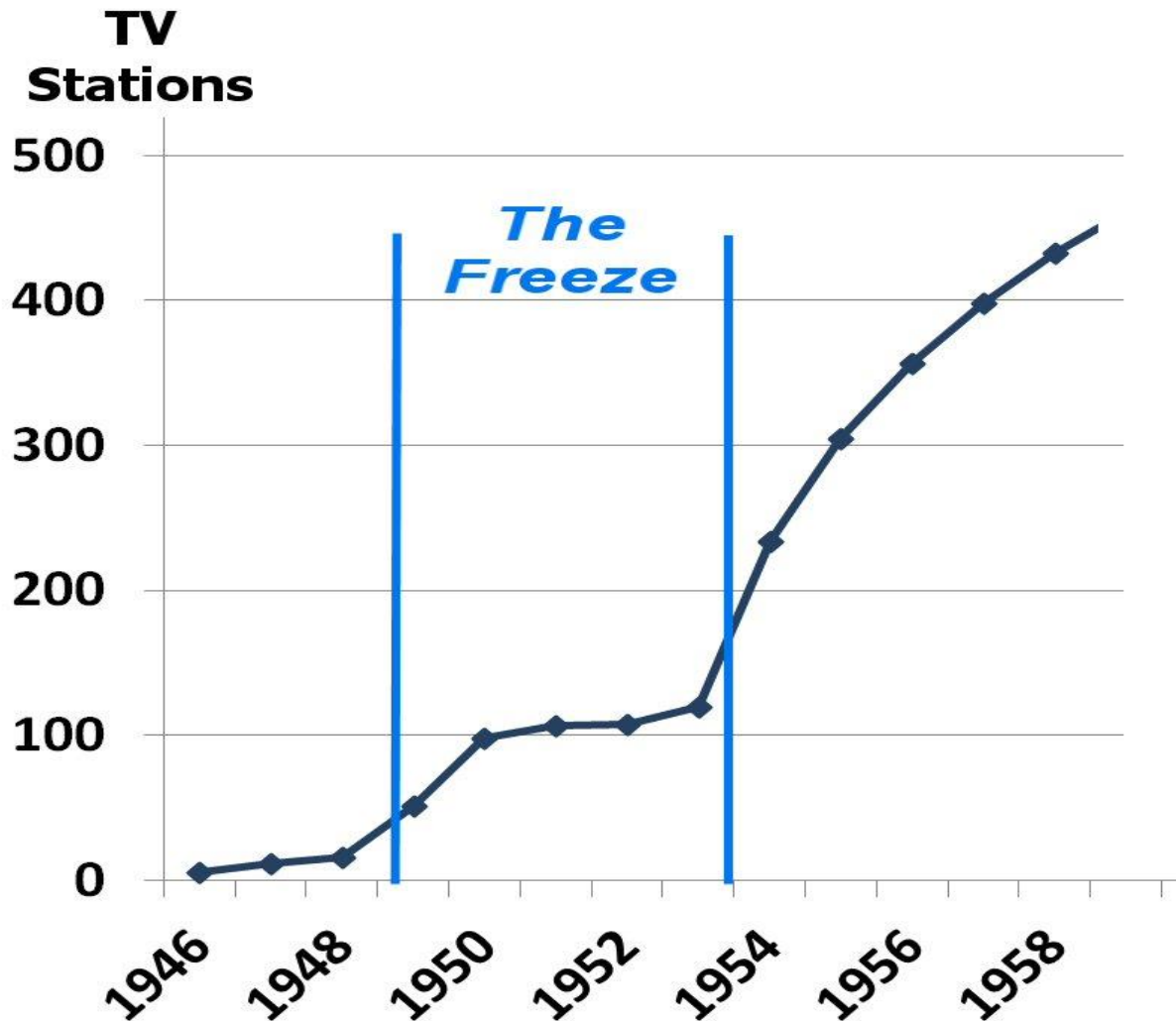
# TV Stations in the US -- June 1948



TV Station Coverage: **Prime**, **Secondary**, **Fringe**

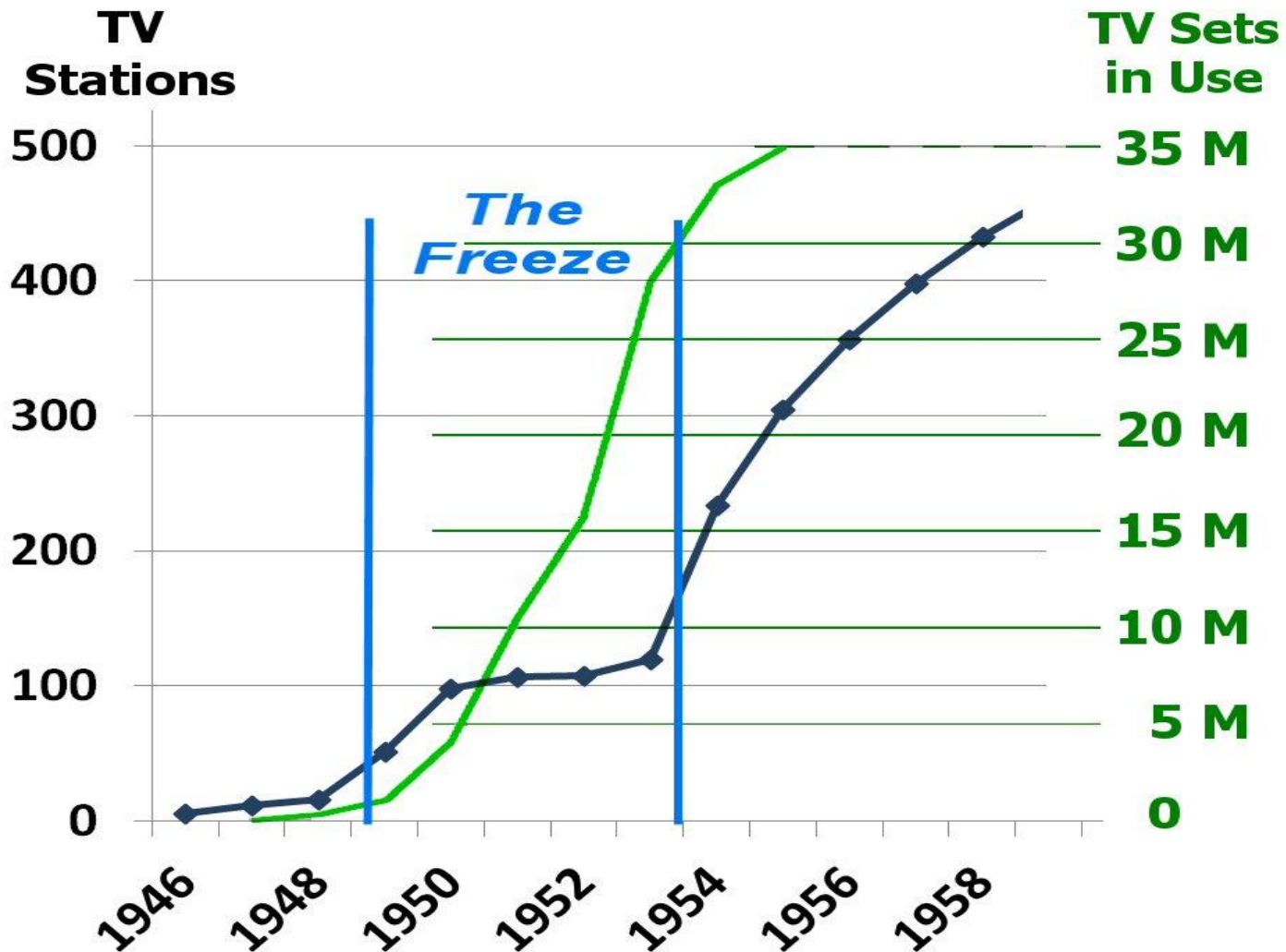
# TV Stations on the Air

## 1946-1958

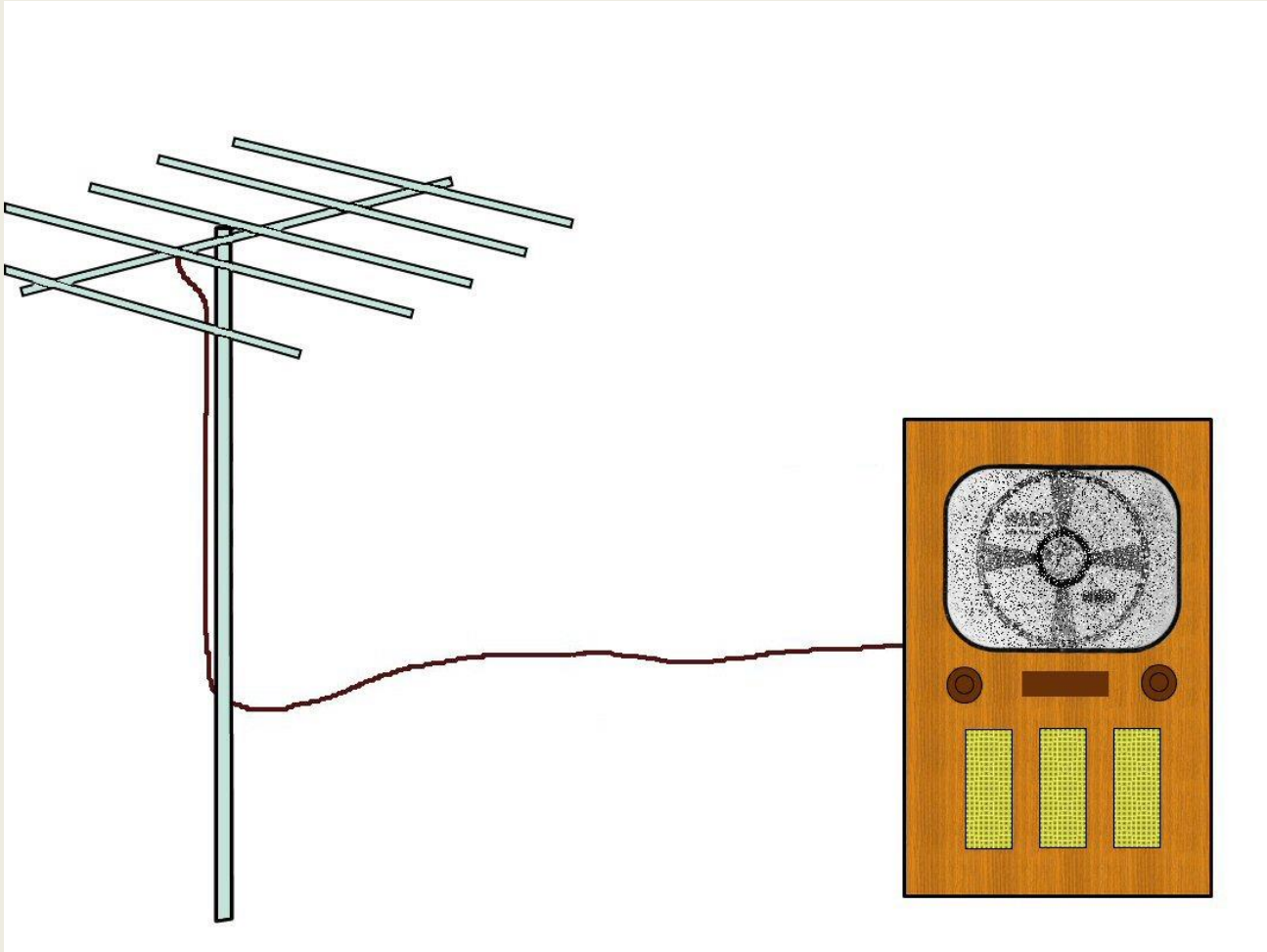


# TV Stations & Sets

1946-1958



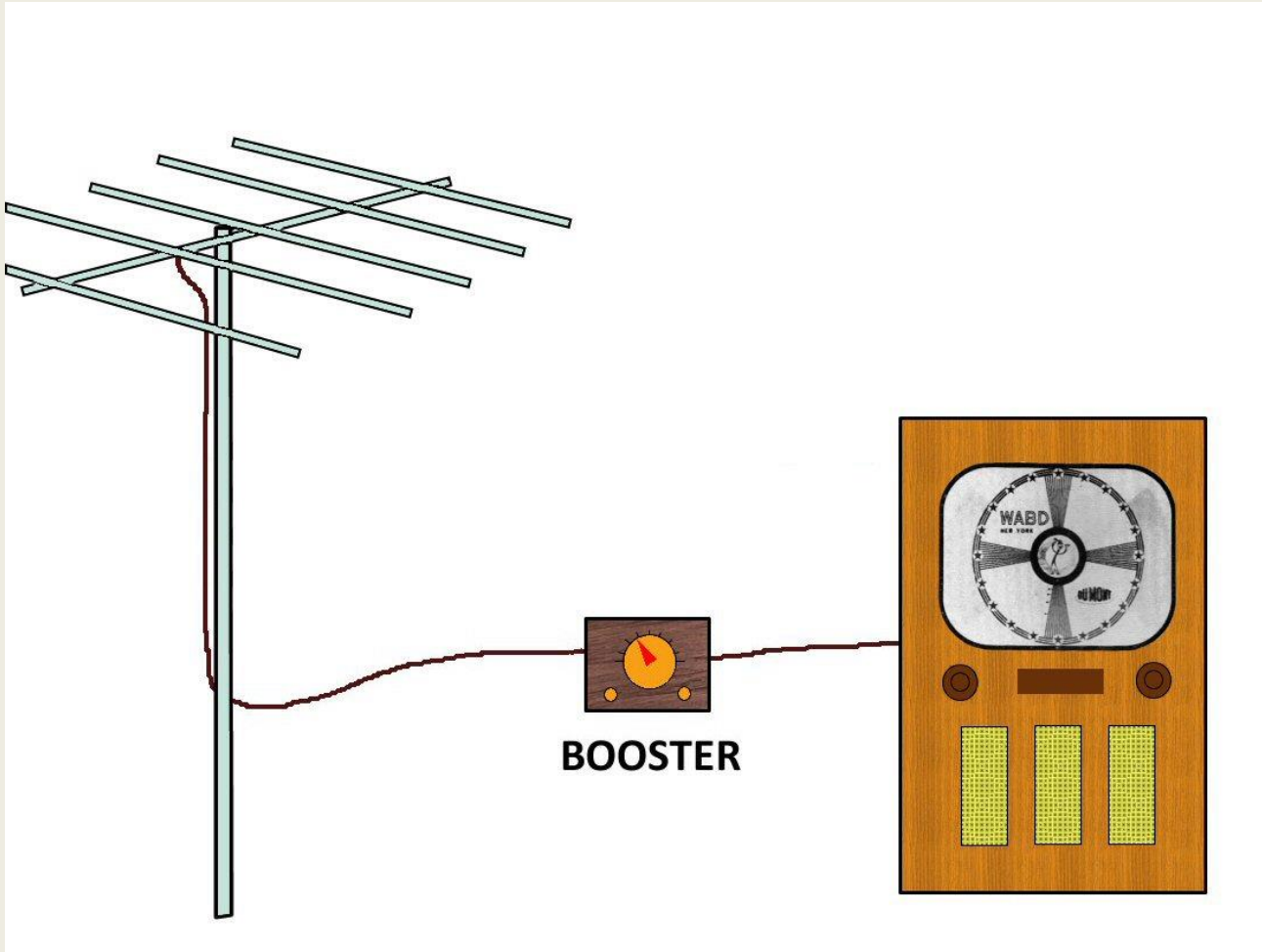
# No Booster



Poor Picture – Unhappy Viewers

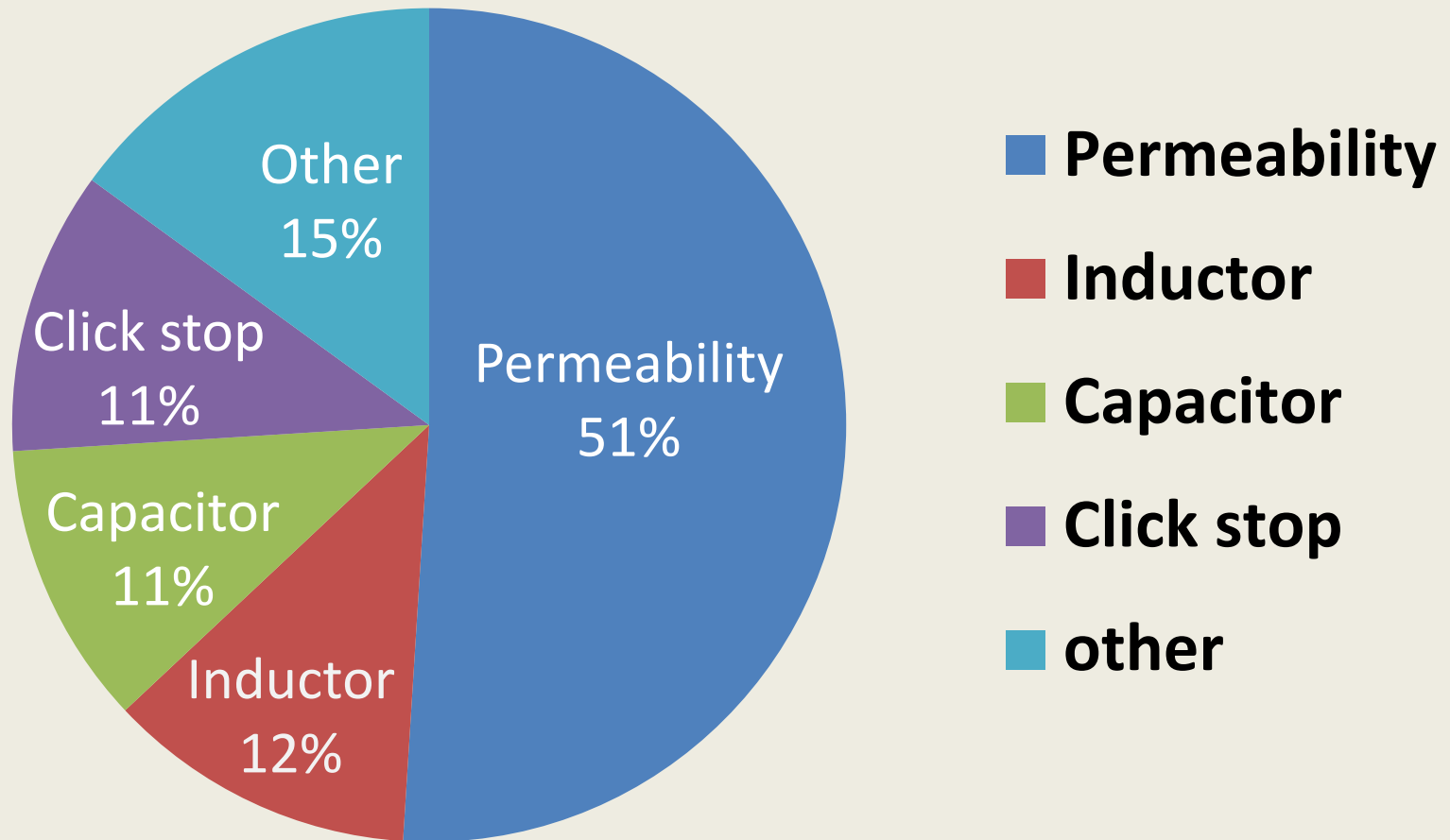


# Booster installed



Picture improved- viewers happy

# TV Booster Tuning Methods



# The Earliest TV Boosters



Millen 92101



Bud TAB99



Masco MTB-13X



Anchor 101-50

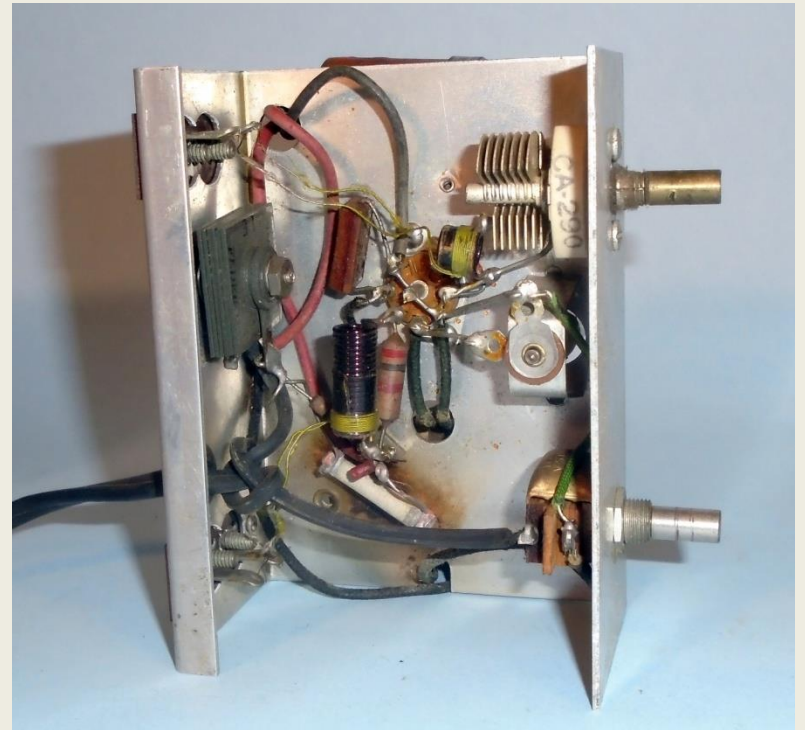
# Millen 92101



Detail showing plug in coil

1947. Designed as a Ham Radio preamp. No power supply.  
Plug-in coil for each frequency range or channel.  
Capacitor tuning (input & output). 6AK5.

# Bud *TAB99*



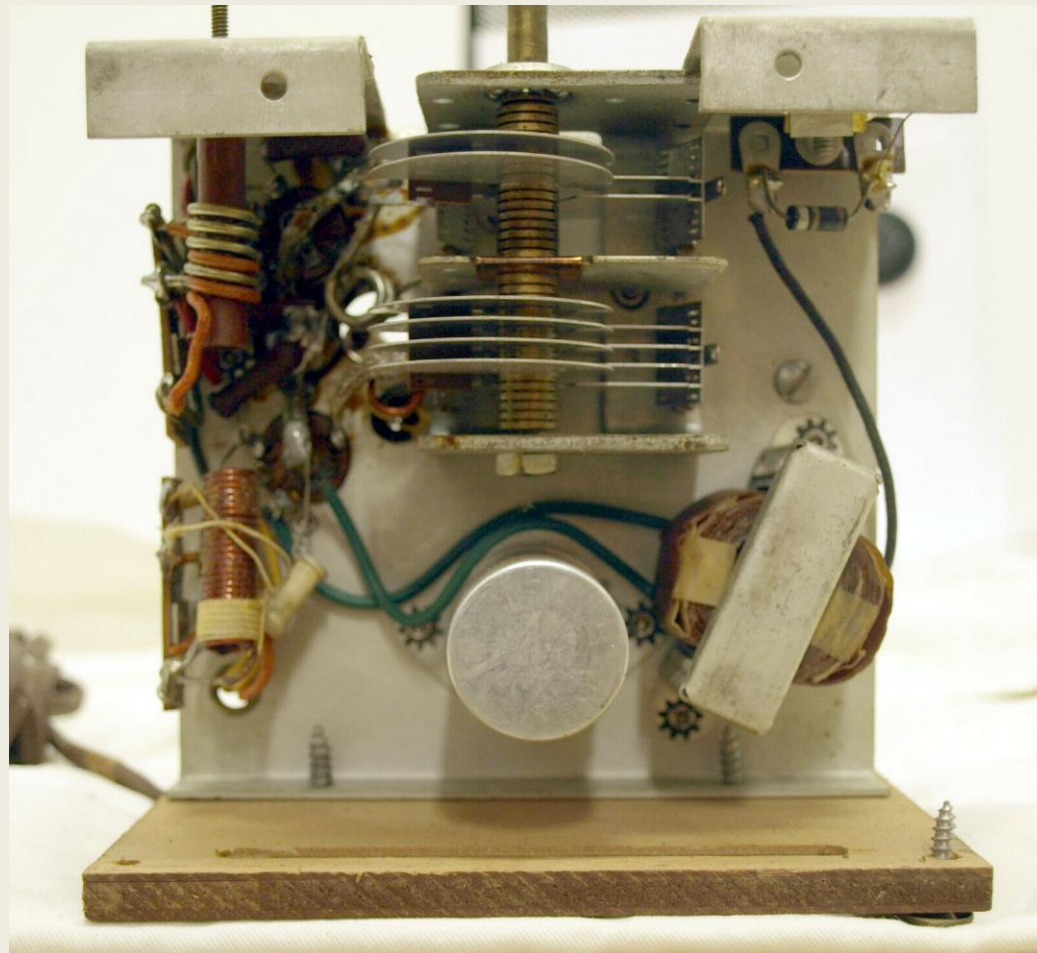
Low band channels (1-6) only.  
Capacitor tuning (input only). 6AK5.

# Masco *MTB-13X*



“Hot” chassis. Capacitor tuning (input only).  
Separate 6AK5s for high and low channel ranges.

# Masco *MTB-13X* (interior)



“Hot” chassis. Capacitor tuning (input only).  
Separate 6AK5s for high and low channel ranges.

# Anchor 101-50

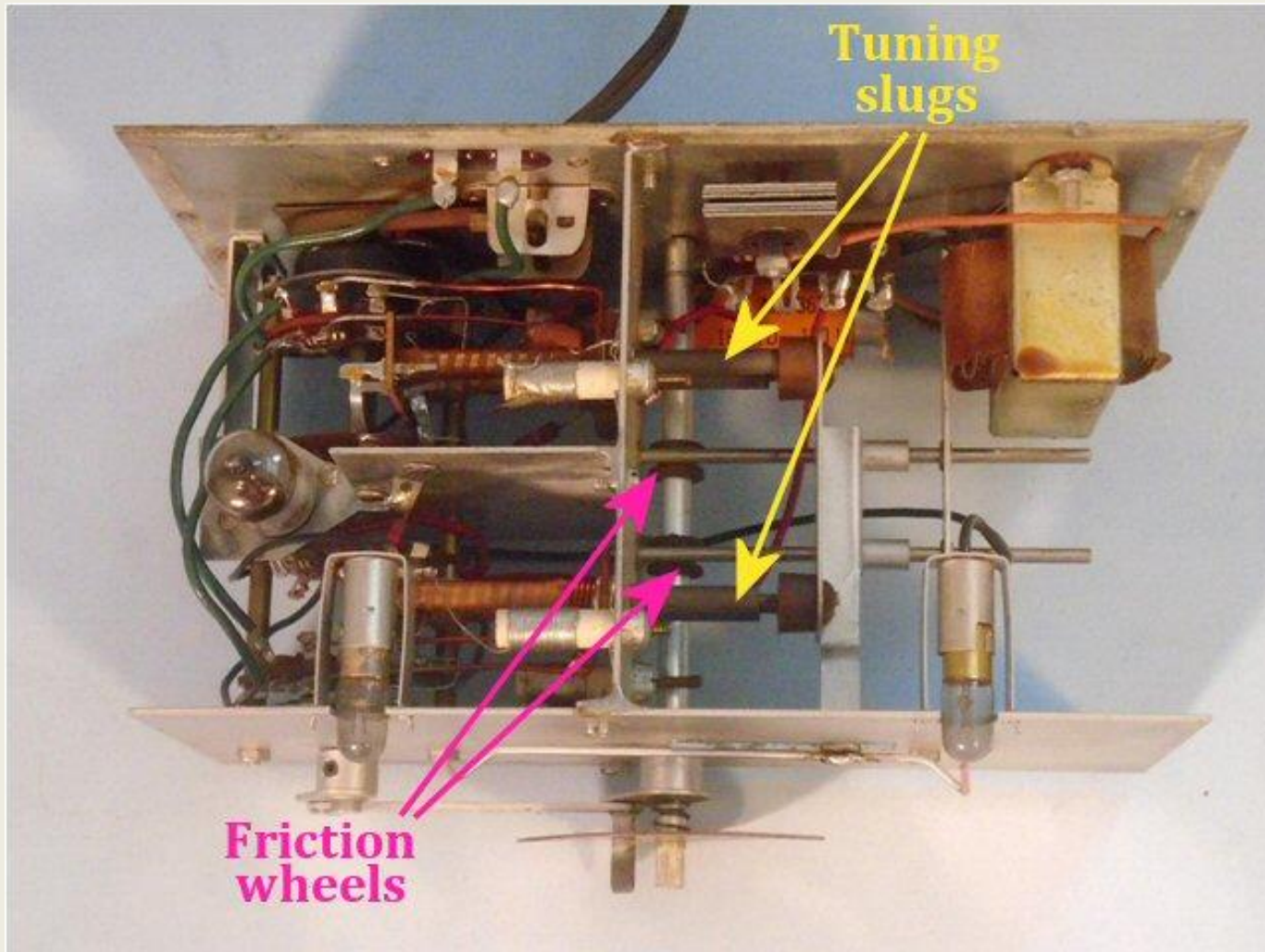


Permeability tuning. Friction drive. 6AK5.



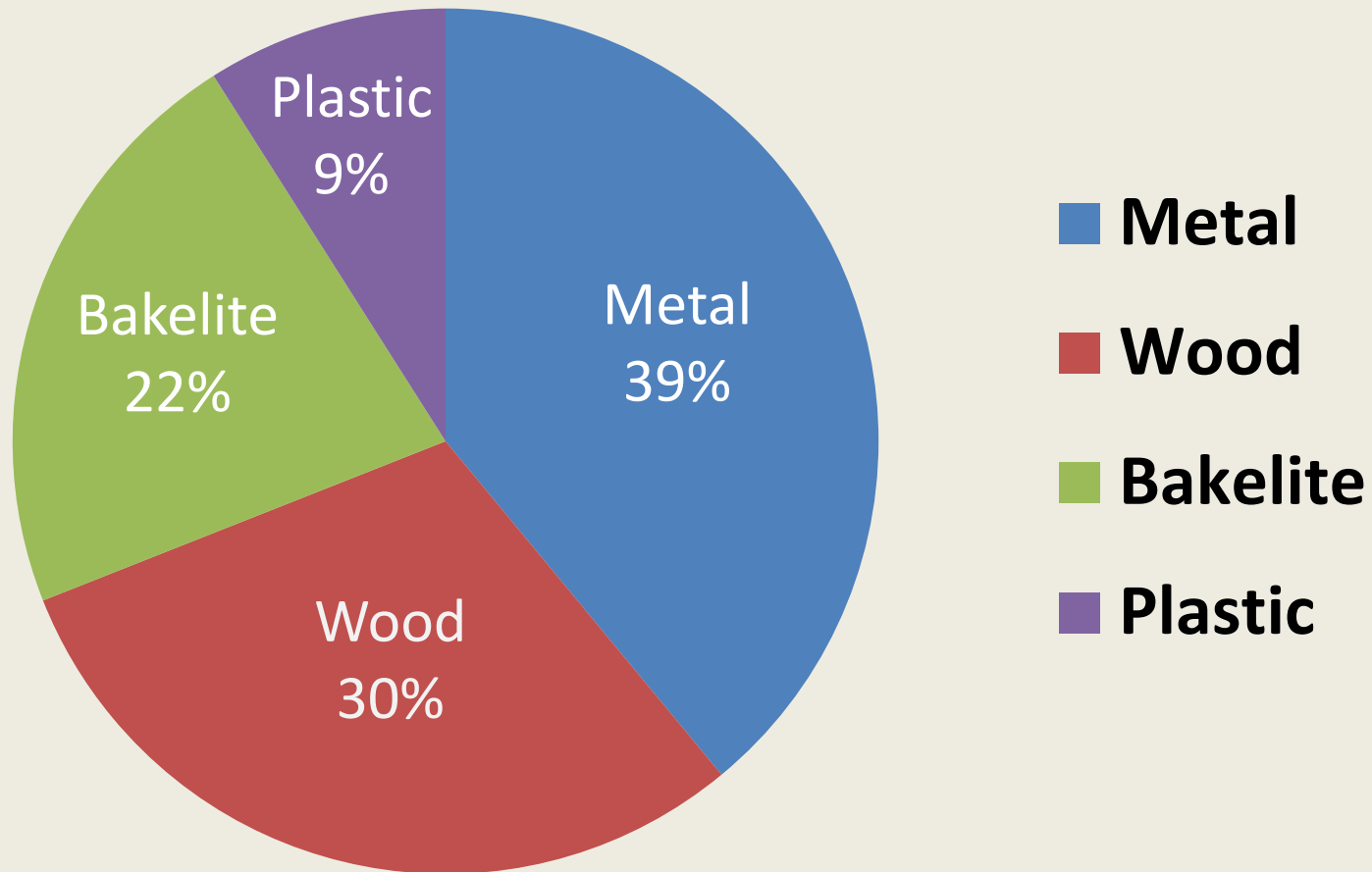
# Anchor 101-50

Interior



Permeability tuning and friction drive.

# TV Booster Cabinet Materials



# Metal vs. Plastic Cabinet

Astatic *BT-1*



Astatic *BT-2*



Identical chassis. Mallory Inductuner. 6AK5.

# Mahogany vs. Blonde

## Decimeter 300



Click-stop tuning. Projection channel display. Two 6J6s.

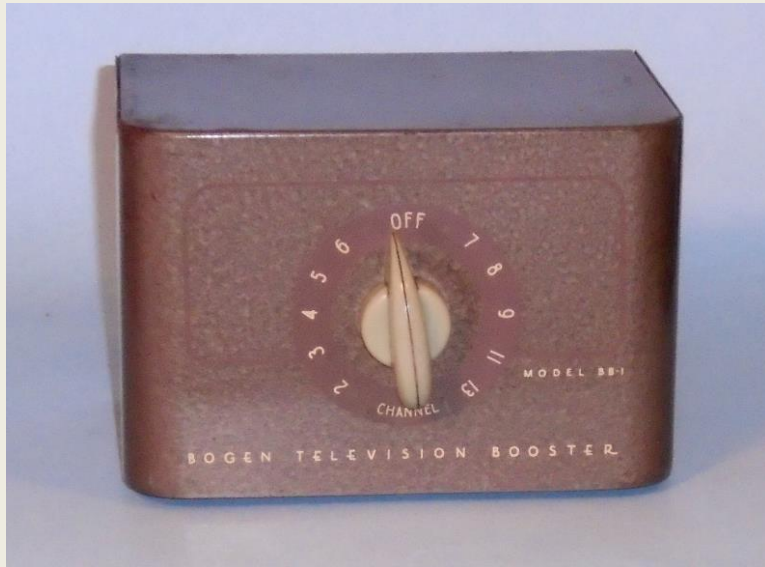
# Natural Bakelite vs. “Ivory”

## Philco *TB-3*



Permeability tuning. Two 6J6s. Repurposed radio cabinet.

# Metal vs. Wood vs. Plastic



BB-1



BB-2

The Bogen *BB* series  
Permeability tuning.  
Two 6J6s.



BB-1A

# Many knobs vs. One

**Astatic AT-1**



Two stage. Capacitor tuning.  
Gain control. Four 6AK5s.

**Alliance AB**



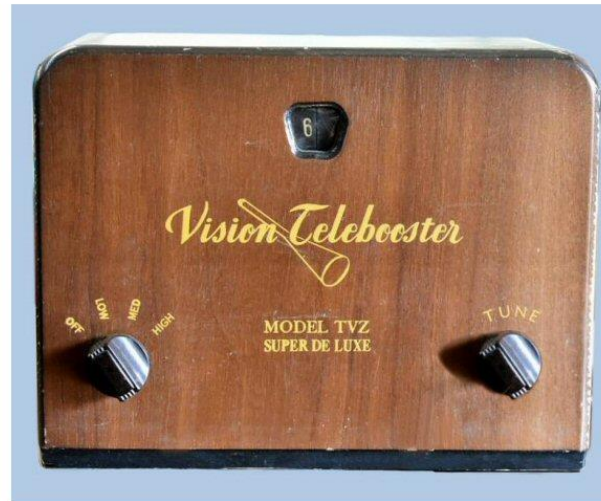
Permeability tuning. Two 6J6s.

# The Vision Labs family

TVX

Commander

TVA



TVX (wood)

TVZ

TVL



# Slide Rulers

(dials, that is)



Standard  
*B-50*

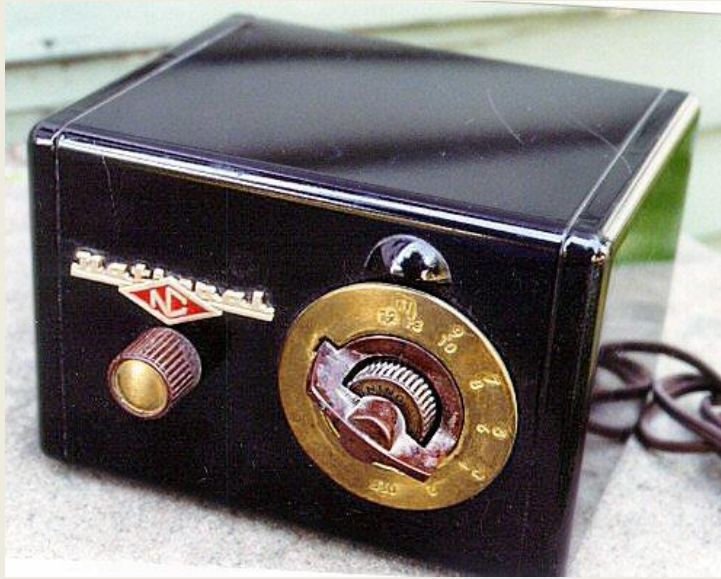


Oak 100



Turner *TV-1*

# Big Dials



National  
TVB-1

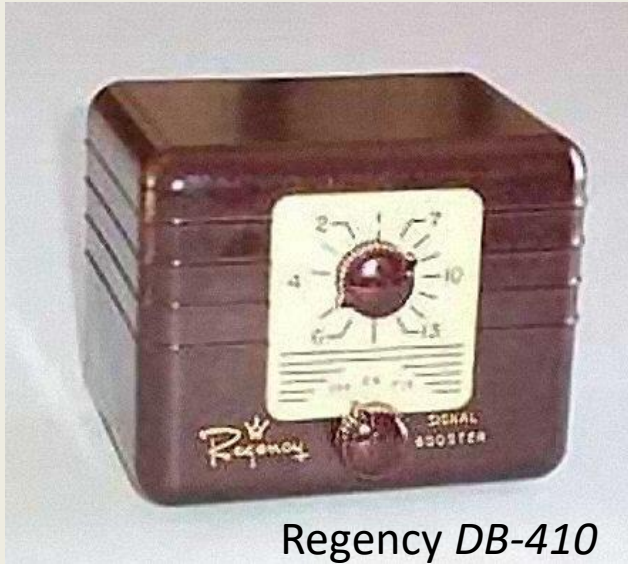


Radiart  
TVB-2



Regency DB-520

# Alike, but Different



Regency DB-410



RMS SP-6J



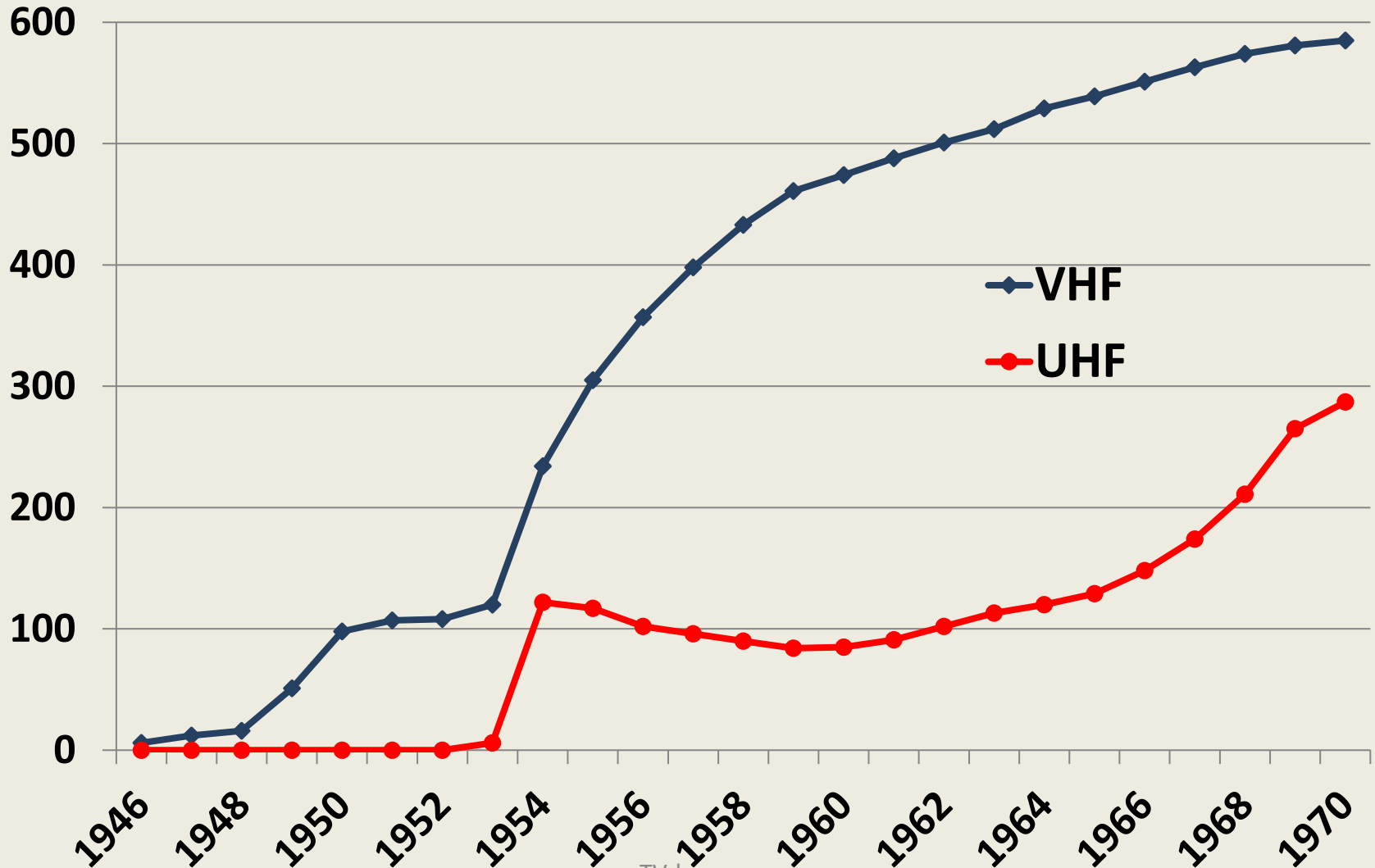
Standard B-51



Telekit Booster

# TV Stations on the Air

## 1946-1970



# Pioneering UHF Converters

DuMont 2151

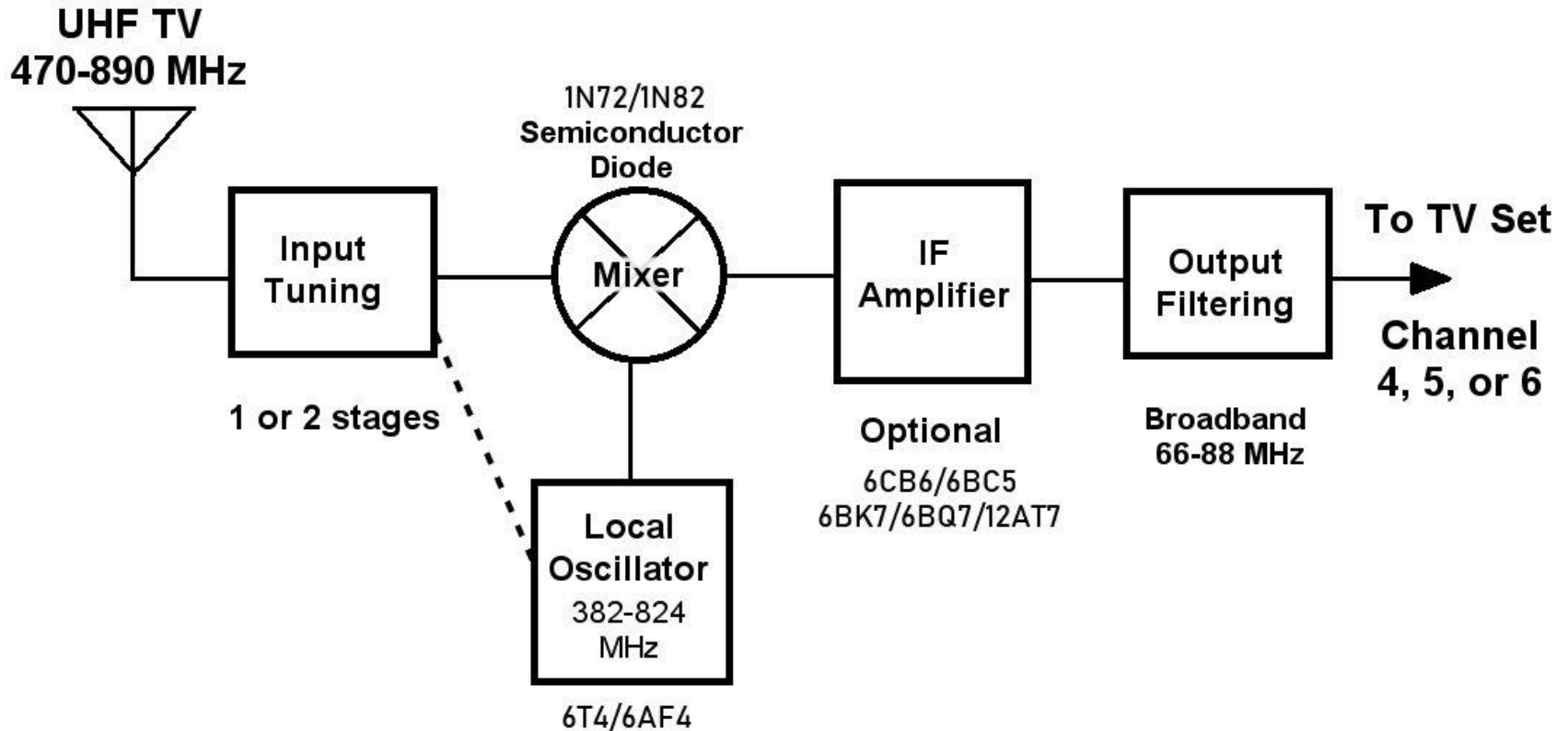


GE UHF-101



Pre-1952. No channel numbers.

# UHF Converter Block Diagram



# Mallory TV-101



The classic Bakelite UHF converter.  
6AF4 oscillator, 6CB6 IF amp

# Blonder-Tongue *BTU-2*



6T4 oscillator, 6AB4 IF amp. \$39.95 list



# BTU-2 series Cabinets



*BTU-2 1953*



*BTU-2B 1954*



*BTU-2S 1961*



*BTU-2T 1963*

# Blonder-Tongue *BTU-2* series

*BTU-2* (1953)



*BTU-2T* (1963)



10 Years With the Same Chassis

# Regency RC-600



6AF4 oscillator, 6BK7 IF amp. List price \$49.95

# The Granco Family

LCU



LUC



CTU



MTU



UH2



SLU

# Transitional: Booster-Converters

**Sutco 22B**

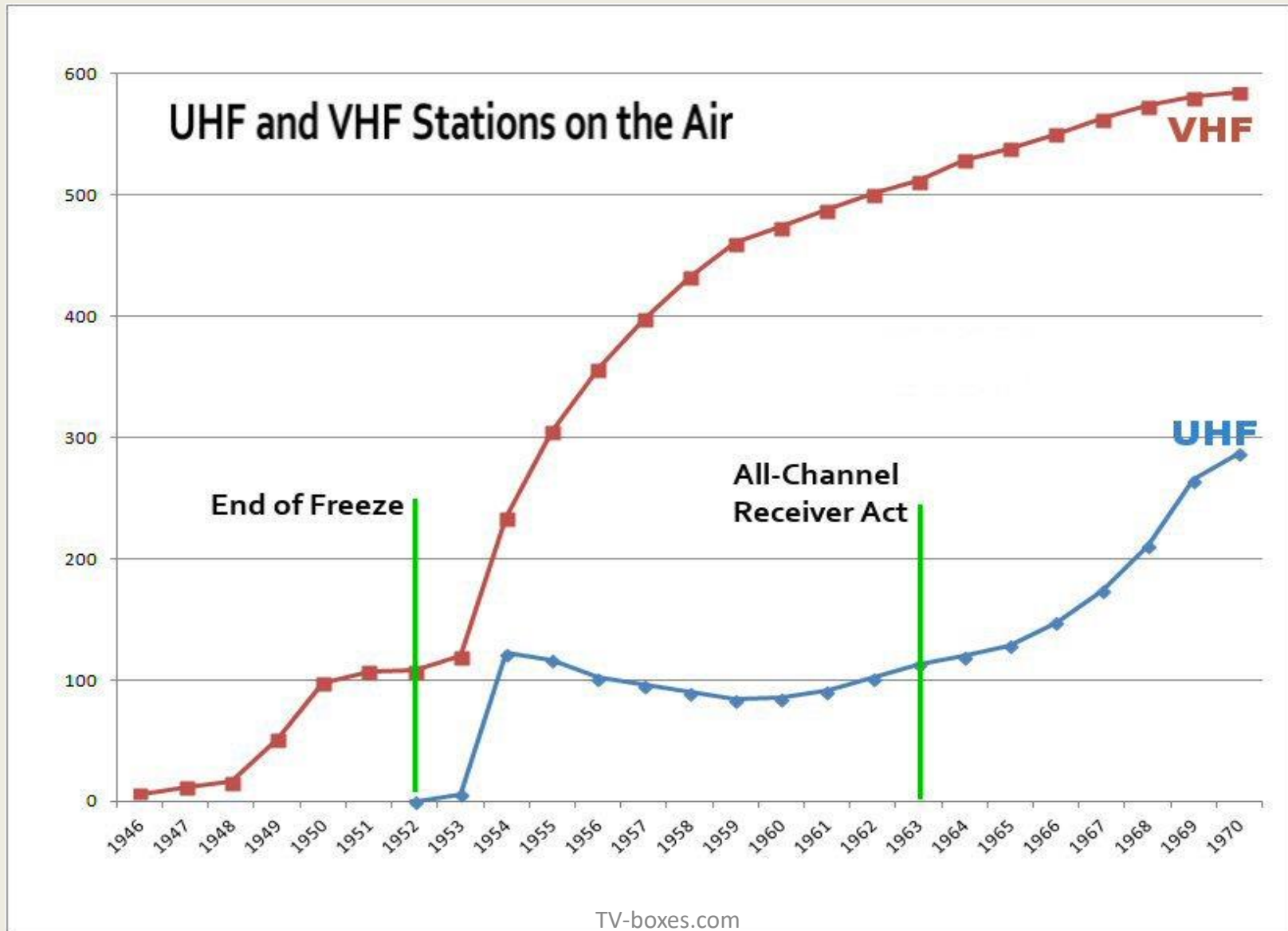


**Astatic CB-1**

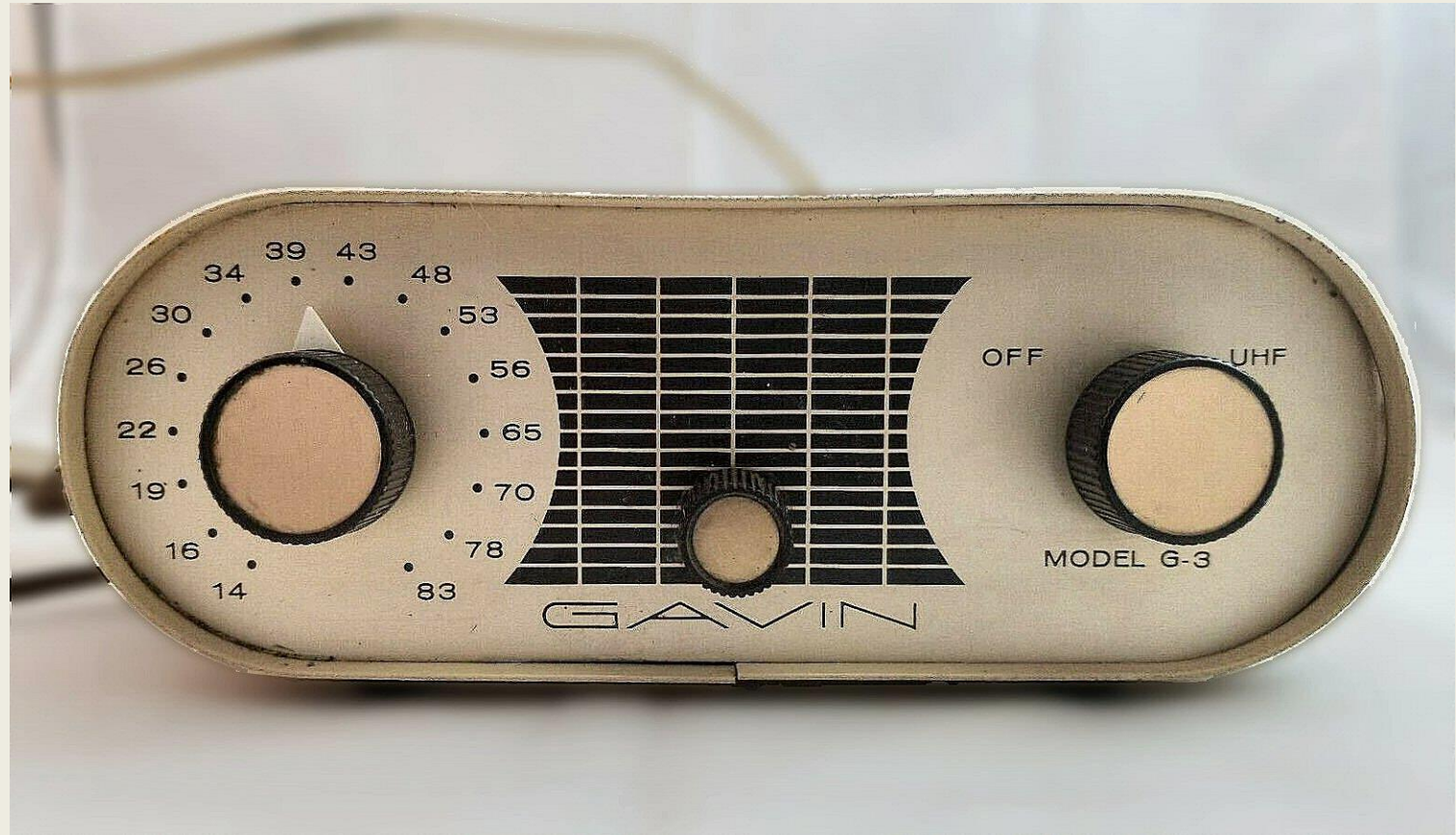


Combined VHF booster and UHF converter

# TV Stations 1946-70



# Gavin G-3



6CW4 Nuvistor oscillator. About 1963.

# Standard-Kollman TA



All transistor. About 1965.



# Jerrold *UTM-1*



Battery powered. Tunnel diode.

# Minimalist Converter

## Johnson 158

### Closeup of active circuit



# Channel Master “*Convertenna*”



Model 4003. UHF converter & VHF rabbit ears.

# A few UHF Converters in my Collection

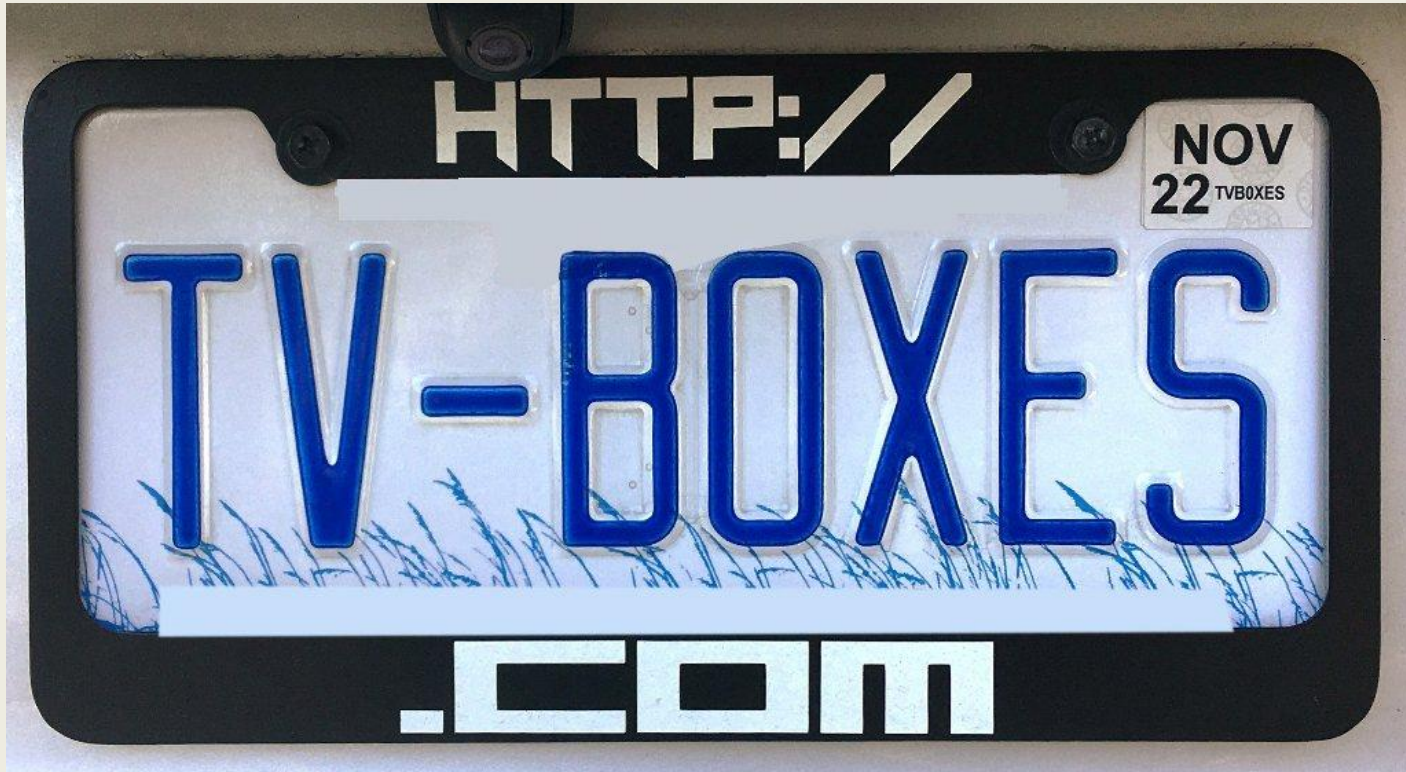


# Home of the TV Boxes Museum



Completed in 2022, 12' x 18'

# My Website:



The website has more pictures and information

Mark Nelson

mark@tv-boxes.com