

# W3ACO

When I first got interested in radio

What was the first thing I built

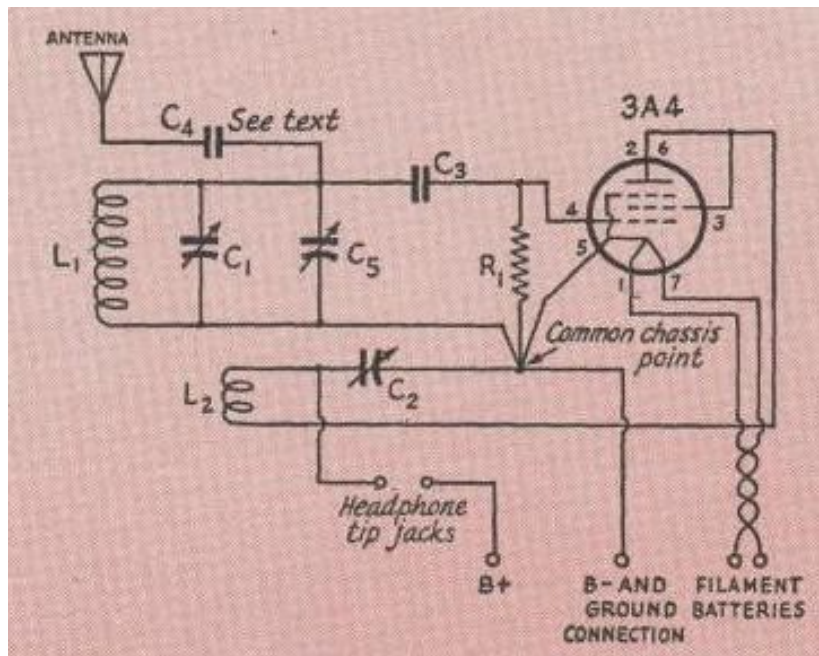


# How I got started

- My father had a Zenith Trans-oceanic radio that covered the short wave bands.
- I became fascinated with short wave broadcasts.
- I was 9 years old in 1948.
- My uncle Sam was a ham, his call was W2IY
- He had a big transmitter in a 6 ft rack.
- He gave me a number of parts.

# My first receiver

- I got a copy of the ARRL handbook
- I built a regenerative receiver using a 3A4 tube.
- It used 2 45 volt batteries for the high voltage and No 6 cells for the filament.



- Coils were wound on a cardboard tubes.
- It worked on 40 meters
- My antenna was a wire about 40 feet long.

# First license

- Received it in Nov 1957
  - I had to go to the FCC office in NYC.
  - I passed the 5 WPM test and the written.
  - K2YHL
  
  - Joined the W2SZ radio club
  - I focused on 2 meter propagation
  - I helped build a 250W amplifier with K2YRZ (SK)

# Home station 1957

- In Westchester county NY
- Transmitter, 6 meter Home brew 4-400 tube with a pair of 810 modulators
- Receiver, NC-98 with a tube down converter
- Antenna, 8 element yagi on a 48 ft tower
- Operating this rig from 1958 through 1963.
- Achieved 8<sup>th</sup> highest in the 1960 VHF contest

- In 1963 worked for RCA on the Atlantic missile range.
- Was comm engineer for Ascension Island.
- Learned a lot about HF propagation
- Two important links:
  - ASC to Patrick AFB, Florida
  - ASC to Mahe, Seychelles

# Return to USA

Worked at several small companies in Maryland.

- Call changed to W3ACO
- Inactive for several years
- Moved to Iowa in 1976
- Built KCJJ radio station ( still on the air)
- Worked for Collins radio beginning 1978

# Collins Radio

- Worked in Advanced technology Dept.
  - Designed a number of receiver modules
    - ARC-186
    - ARN-108
  - Tacan airborne rotating antenna
  - 30 to 88 Mhz tuned antenna for A-10 aircraft



- Satellite weather information system for commercial aircraft
- TTNT digital network a-a and a-g
- Hold 13 patents , communications and avionics.



# New stations

- House station

- Elecraft K2, Hy-Power amp
- Antennas over the years 40 M and 20 M dipoles



- 30 M dipole
- Now 20 M dipole and 80 M vertical

# Home station



# Shop station

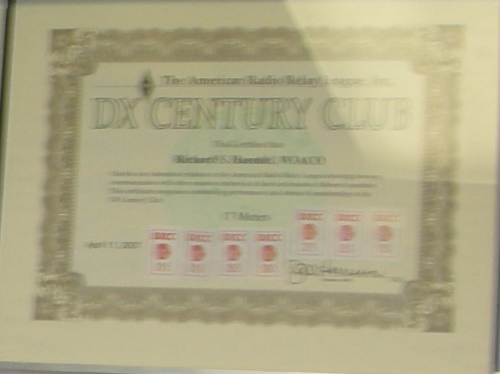
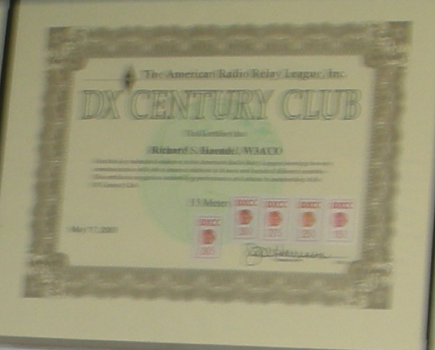
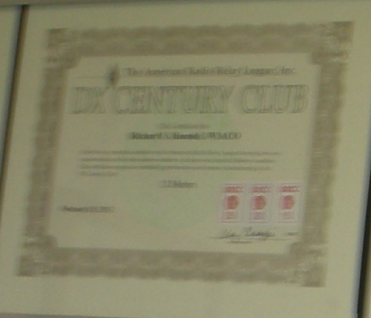
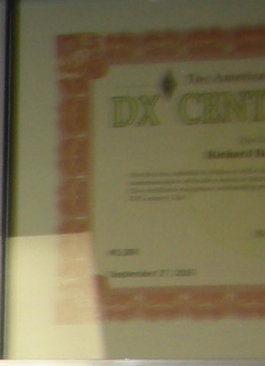
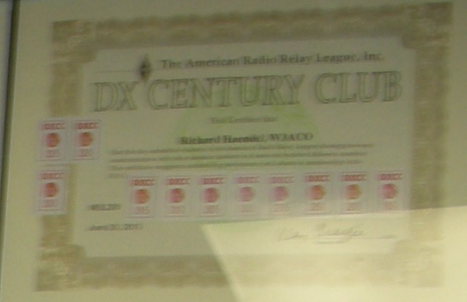
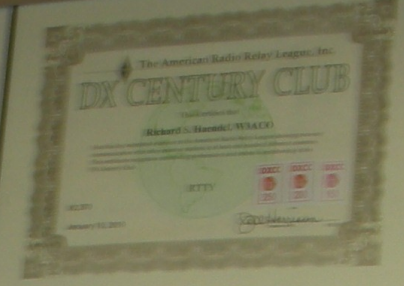
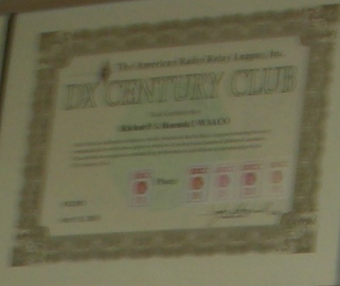
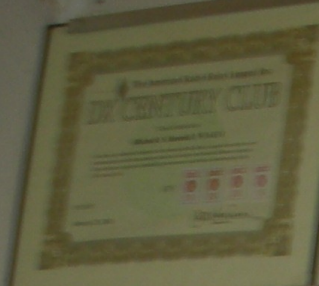
- Located 1 mile North of Cosgrove Iowa
  - A room inside my woodworking shop
    - Rig: Elecraft K3/10, Hy-power amplifier, 600 watts
    - Home brew 6 meter amp at 90 watts
    - Antennas



- 3 element Steppir at 50 ft on a telescoping tower
- 5 element 6 meter yagi at 55 ft
- 30M/40M vertical
- 30M or 40M inverted vee at 50 ft.





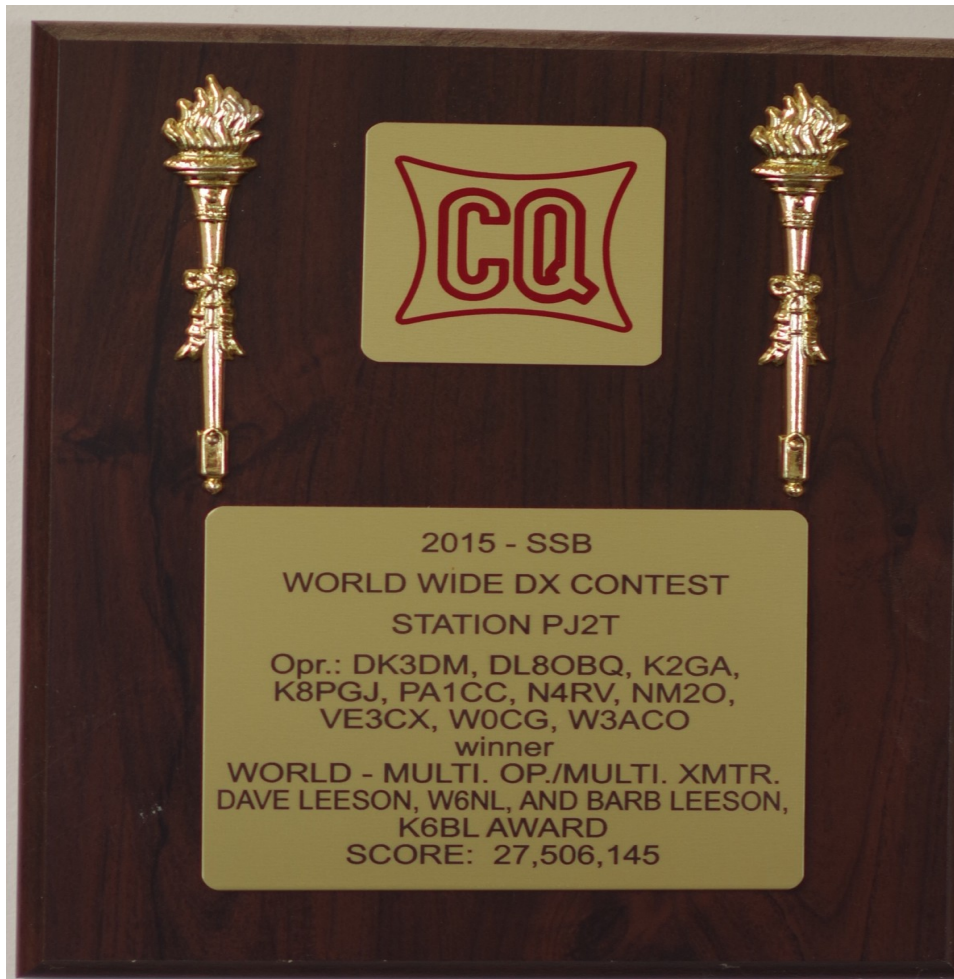


# 40M -30M vertical



# Accomplishments

- Member of PJ2T contest team for CW SSB 2014, 2016 and 2018



- First in the world in 2016 m/m category.



# PJ2T



- DXCC
  
- Mixed \* 330
- CW \* 318
- Phone \* 311
- Digital \* 279
- 80M \* 102
- 40M \* 145
- 30M \* 162
- 20M \* 319
- 17M \* 315
- 15M \* 304
- 12M \* 262
- 10M \* 233
- 6M 17
- Challenge 1859