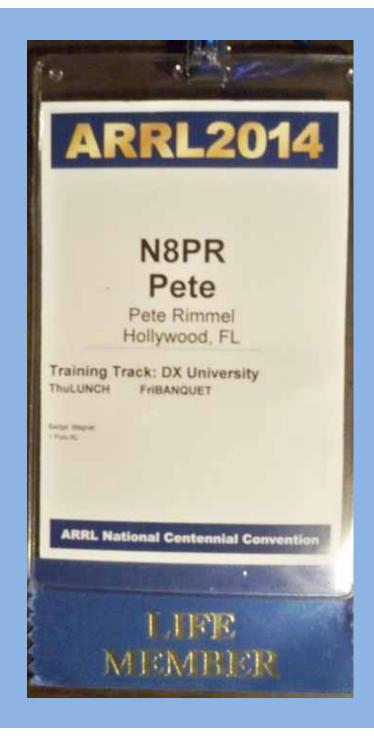
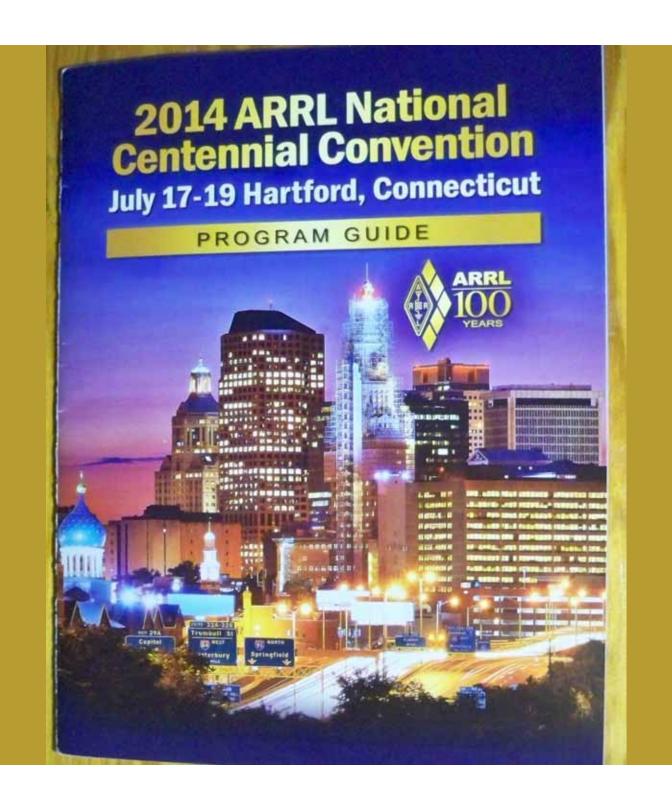
ARRL National Convention
June 2014
Celebrating the
100thYear of the
ARRL





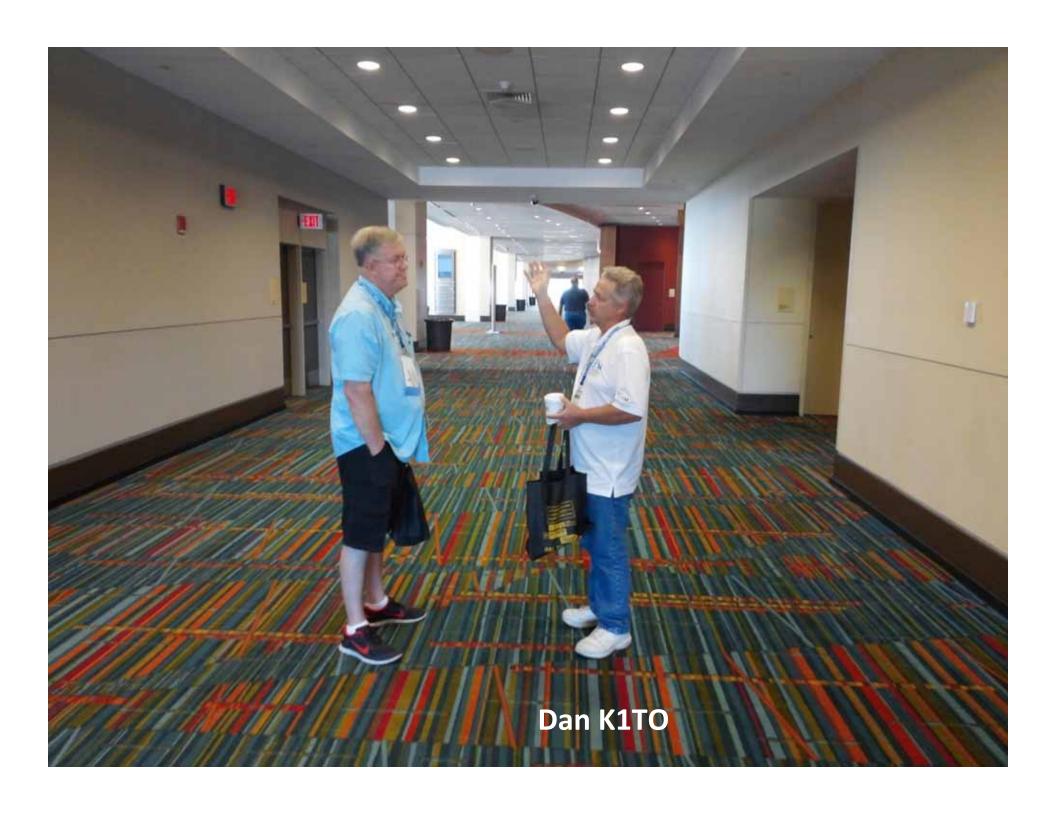








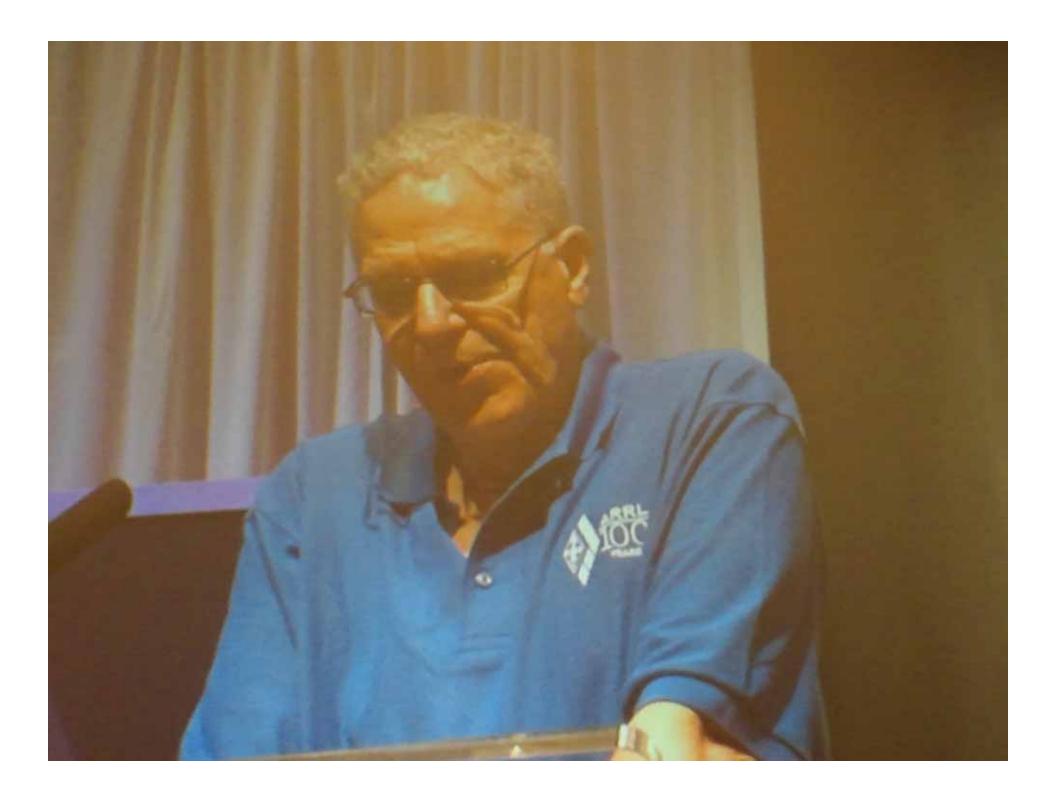






#### Joe Taylor, K1JT, 1993 Nobel Prize Winner

Taylor became interested in radio astronomy after obtaining his Amateur Radio license as a teenager. Today Taylor is well known for his 1974 joint discovery with Russell Hulse, of the first pulsar star in a binary system. Taylor used the Arecibo Radio Telescope to conduct moonbounce contacts with amateurs around the world using voice, Morse code, and digital communications. He is also known for his weak signal communication.



# Weak-Signal S/N Limits

SSB ~+3 dB

FSK441 -1

CW, ear-and-brain -15

ISCAT -17

JT4 -22

JT65A -24

JT9 -26

WSPR -28

# The Next 100 Years?

Simon Newcomb, 1888: "We are probably nearing the limit of all we can know about astronomy."

Lord Kelvin, 1900: "There is nothing new to be discovered in physics now. All that remains is more and more precise measurement."

## Looking Ahead

## Albert Einstein, 1917:

"No matter how we may single out a complex [phenomenon] from nature... its theoretical treatment will never prove to be ultimately conclusive.

I believe that this process of deepening of theory has no limits."

## Things you can count on

- · Radios become increasingly "digital"
  - A/D, D/A occurs closer to antenna
  - Good engineering will involve both hardware and software
- Science, technology, and Amateur Radio continue to benefit from healthy crossfertilization between amateurs and professionals.
- Amateur Radio continues to thrive and serve the public interest



N8PR Pete

K1JT Joe Taylor

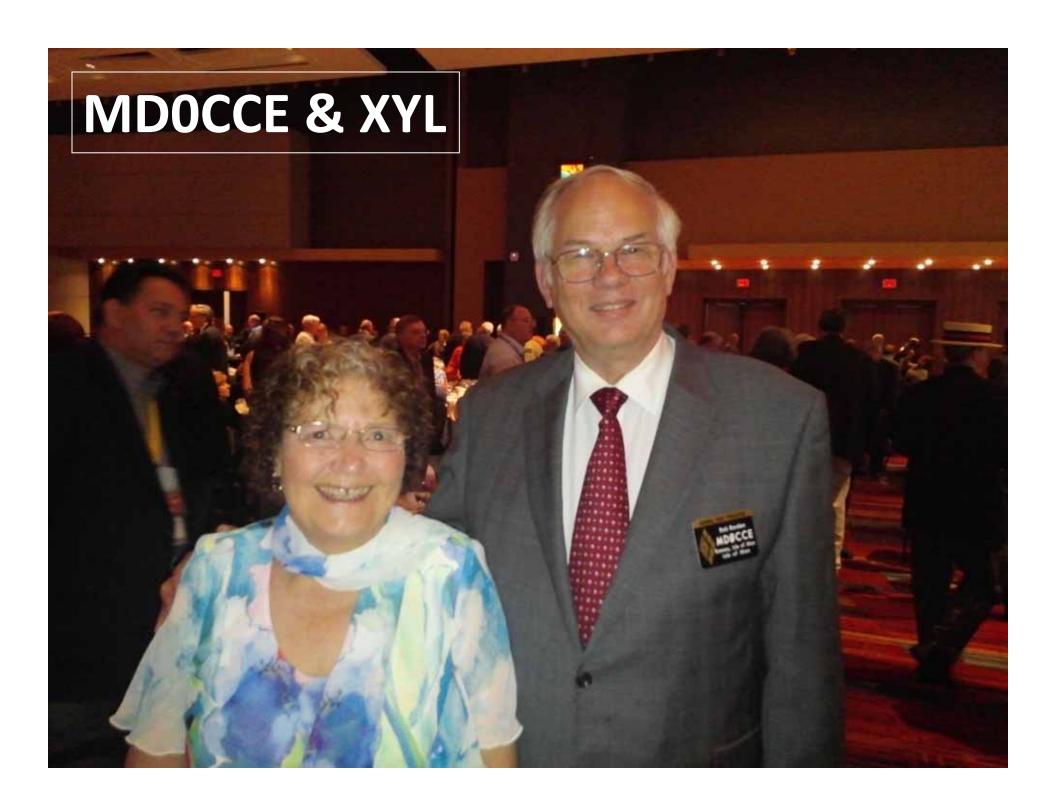
W4AS Sebastian

#### Rick Roderick, K5UR, ARRL First Vice President

Roderick obtained his Amateur Radio license over 45 years ago and has since participated on the ARRL Board of Directors for 22 years. Roderick also chaired the DX Advisory Committee for many years and helped in the creation of Logbook of The World and the DXCC Challenge Award. Roderick holds many operating and achievement records on VHF/UHF and has received many awards.

















**Bob N200** 





### Carl Luetzelschwab K9LA





ARRL ANTENNAS

Carl was licensed as WN9AVT in October 1961. He selected K9LA in 1977 when the FCC offered 1 x 2 call signs to Extra Class licensees.

Carl enjoys propagation, DXing, contesting (he was the Editor of The National Contest Journal from 2002-2007), antennas and vintage rigs.

Carl retired in October 2013 after 41 years as an RF design engineer. He is a card checker for both ARRL and CQ awards, is at the Top of the DXCC Honor Roll, and enjoys viewing old QSLs (especially from deleted entities).







Jeff Beals – WA4AW So. Fla. Section Manager Pete - N8PR

Don Rehman – K4AC S. E. Division Manager

