## TIMELINE OF ARES ALACHUA COUNTY AMATEUR RADIO ARES DIGITAL DEVELOPMENT

## June 30 2017

Approx Jan 2016	KX4Z approved for WINLINK gatewayInverted Vee antenna goes to top of that oak tree and down both sides. Fed with auto tuner.
May 2016	Gibby builds cables for EOC to allow digital communications (SHARES / amateur) with Signalinks procured by Jeff Bielling. May 14 <sup>th</sup> , 2016 – Objective testing of HF Antennas conducted and document, revealing severe performance deficits.
	Productive meeting with Ryan & Jeff Bielling where we plan better HF antennas (and discussion of the VHF tower work).1
	Hi folks, I had a delightful and extremely productive meeting with Jeff bielling and many others on this list today. After the appropriate apologies for my "bull in a China shop" approach to much of life and my lousy social skills, we made a boatload of progress.
	Jeff matches almost perfectly my paragraph about the kind of person who wants to get things done. Great questions, great interaction, I much better understand what he needs to accomplish and he has a wonderful view of what needs to happen.
	1. VHF antenna improvement: Ryan Lee is going to work up getting a certified climber to install the new 2 meter antennas far higher on the tower, and space so you cover the whole county.
	2. HF antenna's: Jeff really favors putting a horizontal dipole between light pole tops in the back of the building, it will keep him out of trouble with the powers that be. The distance is almost perfect, allows for about 120 foot dipole, with the center supported by a center light post, move the matching network under the building overhang, run coax on top of the roof so he doesn't have to pay to put in conduit, pull it in where Ryan has penetrations. That part could be RG 58 if he has tight space.
	Height of that antenna it would be roughly 20 feet, it will make a nice NVIS antenna on many many bands with the matching system.
	3. While he's going to have a climber of the tower, I suggested a resonant 20 or 40 m half wavelength wire vertical antenna, stood off from the tower a bit, and on the north or northwest side because he can get it almost for free and replace the JVT6 80. That will give him redundancy back up for HF.
	It turned out Jeff didn't know that there was a problem & he was delighted to figure out solutions

	When link RMS express is installed under my call sign for the moment and we Tested telnet connection which works fine.
	FLDIGI is also installed and configuration will have to wait your arrival of the Signalink
	It turns out one of his goals is to have digital connection to his shelters, two solutions for that are 2 m WINLINKeasily done! or DSTAR , also probably easily done once controller is done. The VHF antenna is a must either way.
	Great meeting, great interaction, looking forward to a much better things especially when the money arrives in July.
	Great new! Now off to Red Cross! Gordon
	May 24 <sup>th</sup> – report of all-day long WINLINK propagation test with variable
	antenna heights from Windsor area, preparation for
	proposals.
	May 25 <sup>th</sup> 2016 NCS521 license issued to Gordon
	Gibby to run a SHARES digital server. Antenna is a
	sloping dipole from top of oak tree to top of bush,
	fed with 300 ohm ladder line and auto-tuner.
	Initial Effort to get EOC on SHARES licenses flops. Very end of month, NCS521 is on and working as a gateway for SHARES
June 2016	June 22, 2016; Full scale test of a proposed vertical antenna for the EOC is conducted and documented.
July 2016	July 21 2016, 57 page report on problems with EOC Antennas and proposed
5 ary 2010	solutions created/submitted.
	http://www.qsl.net/kx4z/CompleteEOCProposal.pdf
August 2016	
September 2016 (approx)	Sept 28 – VHF Antenna goes up 35 feet at Jim Bledsoe's house.
October 2016	Digital stations are working at Jim Bledsoes' and Rosemary Jones' houses. (After bledsoe tried a smoke test on a radio)
	October 12 <sup>th</sup> – Red Cross Amateur Radio Club is constituted to allow us to get a FCC license for that location and others.
	A team of 5+ people worked an entire day to put together Rosemary's antenna and get it installed.

	Rosemary's vertical. I don't have any photos of Bledsoe's.
	Art & Cindy's house – tough installation on limb very back of their house. Since then they have installed 2 additional antennas, one on roof, one in back yard (HF Vertical)
November 2016	Tom Cox's house Tom has a unique way to put up antennas. We later replaced this with a collinear dual antenna system to give him two frequencies and bridging between them.

	November – installed 80 meter "vee' for Rosemary. Nov 22 2016 Red Cross ham radio club secures NF4RC call sign.
December 2016	Worked on getting book ready to submit.
January 2017	Jan 9 – First Edition of <u>Amateur Radio Digital</u> <u>&amp; Voice Emergency Communications</u> is released.
	Jan 23 <sup>rd</sup> 2017 ARES group replaces broken antenna on top of Beatty Tower and installs 2 <sup>nd</sup> antenna + 2 <sup>nd</sup> digital station – dual frequency. Joe DiPietro of RF Engineers showed me now to build that mount and install antennas.

February 2017	Dental Tower Replacement 3-band resonant dipole built by KX4Z to assist the GARC club.
March 2017	Art & Cindy build/install a Gap/TITAN vertical HF antenna Printed circuit board is developed for the sound-card interface
	March 29 <sup>th</sup> , Florida Forestry Service graciously allows us to install digital repeater NF4RC-7 at Forest Grove lookout tower.
	With this repeater in place, our coverage to a 20 foot antenna expands to approximately 4000 sq miles.
April 2017	April ARES meeting is a tabletop exercise with all radios, in preparation for the Full Scale Exercise 17 issues are discovered
May 2017	May 6 <sup>th</sup> -"Hurricane Test" Full Scale Exercise held, involving EOC, Red Cross, Senior Center and Easton – Newberry Sports Complex



