NR3I APE - After Action Report

APE QTH = Akridge Scout Reservation - BSA, Dover/Camden, DE Part of DelMarVa BSA Council 091 <u>https://www.delmarvacouncil.org/</u> Op's = Steve WB3LGC PODXS #2814 and co-Campmaster Fred KB3VBA Date = 17-AUG-2023 to 20-AUG-2023 APE Grid Sq = FM29fd Home QTH for WB3LGC/NR3I = Wilmington, DE FM29er The distance between Grids, FM29er and FM29fd is 40.788 miles. NR3I PODXS #2878 "QRP Group" club call and we used QRP to drive the amp...



The Akridge Scout Reservation Admin Building, Home for most of the weekend.

The "story" started a week before APE. Fred was asked and he asked me if I could also help with the Campmaster "duties" at Akridge for a large church group that was going to use all the campsites and pavilions for a long weekend. I said, yes.

I got thinking... This is August. APE, as I am always looking for a radio event or contest to "play" with during our Campmaster weekends. APE was perfect. I could make the event as long as I wanted. It was Summer (not COLD). AND, Akridge was more than 20 miles from home (like 45 miles). The Scout Camps also have a kitchen and hot showers, where we stay... I was all set, just pack, take leftovers out of the freezer, and load the 4x4. I was on my way...

We arrived at Akridge on Thursday afternoon, the 17th.

Since the two air conditioned buildings are used for BSA Council staff during the day and there was going to be a staff meeting until 8pm, setting up "home" was delayed. Since the buildings would also be staffed on Friday, we picked the better building (?) until Friday afternoon when Camp becomes "ours"...

I was hoping I could get the QRP rig and the Raspberry Pi running fldigi so that I could start operating and be able to move to our final destination the next day. But, Thursday I could not get the RPi to display the RPi screen on the ThinkPad Iaptop by using VNC remote software. It worked at home... Friday morning I solved the display issue by going through a router and my own WiFi node, but I could NOT get audio between the KX3 rig and the RPi fldigi/flrig software...

Plan ahead... I used the laptop and that worked. I used the same PulseAudio software as the RPi. With the KX3 hooked to the 20m BuddiPole vertical, I was on-line. Called CQ with 10 Watts, no QSO's.

The Laptop:	
steve@T460p:~\$ neofetch	
	steve@T460p
MMMMMMMMMMMMM	
MMMM`:::::`MMMM	OS: Linux Mint 21.2 x86 64
. : MMMM . : MMMMMMMMMMMMMMM : . MMMM : .	Host: 20FWCT01WW ThinkPad T460p
- MMM - M MMMMMMMMMMMMMMMMMMMMMM	Kernel: 5.15.0-79-generic
* : MMM : MM* * : MMMM : : : MMMM : MMM : *	Uptime: 1 hour, 23 mins
: MMM : MMM ` : MM : ` ` ` ` ` ` ` ` ` : MMM : MMM :	<pre>Packages: 3122 (dpkg), 30 (flatpak), 12 (snap)</pre>
.MMM.MMMM* :MMMMMM- *MMMM.MMM.	Shell: bash 5.1.16
:MMM:MMMM* :MMMMMM: *MMMM-MMM:	Resolution: 1600x900
: MMM : MMMM [*] : MM MM MM : [*] MMMM : MMM :	DE: Cinnamon 5.8.4
: MMM : MMMM [*] : MM MM MM : [*] MMMM - MMM :	WM: Mutter (Muffin)
. MMM . MMMM ` : MM : : MM : : MM : ` MMMM . MMM .	WM Theme: Mint-Y-Dark-Agua (Mint-Y)
: MMM : MMM - ` - MMMMMMMMMMMM - ` - MMM - MMM :	
	Theme: Mint-Y-Aqua [GTK2/3]
: MMM : MMM : ````: MMM : MMM :	Icons: Mint-Y-Sand [GTK2/3]
. MMM . MMMM :: MMMM . MMM .	Terminal: gnome-terminal
- MMMM MMMMMMMMMMMMMMM MMMM - '	CPU: Intel i5-6440HQ (4) @ 3.500GHz
' MMMM``:::::``MMMM'	GPU: Intel HD Graphics 530
' - MMMMMMMMMMM - '	Memory: 2688MiB / 15717MiB
``-:::··`	

We moved to the Admin building Friday afternoon. Our QTH for the duration. I ran coax under the back door, placed the vertical out of our way in the "yard", measured and checked radials, checked VSWR with hope of a better signal strength... I DID make two (2) QRP QSO's on 20M before dinner. I have done a lot of QRP, but I have heard that "Time is too short for QRP", well they may be right? I connected the 100W KXPA100 amp after dinner and was still on 20m at 50 Watts, I made more QSO's at about 9pm. It has been a long day, it was bedtime...



The Elecraft KX3 and KXPA100 with 80/20 rails and R.A.M. mounts and Fred's Fan and the 20m Vertical.

Saturday: The APE quest begins for real.

• AT THIS POINT – it is a Milestone... I have been trying to find a useful antenna to use at the Admin Building. This is working. Maybe not the best antenna, but it works. There are trees near the back door, but not spread well enough to be useful alone. In the past, I have tried to mount my 40' mast to the building – without messing up a NEW building... I NEED a trailer hitch type antenna mount. I just need the 2" stock and my #2 son has a welder. Or, I have a metal tri-base, I just need to use guy ropes. Winter is not the time to be messing with it and Campmaster weekends are mostly winter. So, the BuddiPole may be my antenna solution at Akridge.

- Fldigi need to make sure all the settings are correct.
- Need a FAN for the amp. Without the fan, I can only run 50 Watts.
- Updated MACRO's ongoing improvements.
- Noticed "it" was using USB not DATA (compression is OFF in DATA mode...)
- The charger for the laptop is causing noise pulses in the KX3.
 - I had the original supply and replaced the cheap knock-off China supply.
 - I also had DC-DC laptop supplies IF I operated "at Camp Portable with Solar" (yes, 2) they work in the 4x4.
- I was calling APE "portable" rather than PSK31.
- It is good that there is little to no wind, as I forgot the "dog" stake to hold down the antenna tripod.
- Next time multi band antenna.
 - I did use the tapped coil to set taps at 20m, 30m, and 40m.
 - The balun on the BuddiPole is rated 100W, most likely SSB.
 - It was warm at 100W.
 - Make a dual core common mode choke with FT240-31 cores for the low end and a dual core FT240-43 for the high end.
 - A remote antenna tuner might be a better solution with the 40' fiberglass mast.
- The mount on the top of the BuddiPole tripod has a small Alan/set screw and it was loose. I found the wrench on Sunday when packing. Even better, I found a socket head cap screw with a finger "knob" that does not need a wrench...
- The fldigi audio output attenuation is getting changed. How ?? As long as I don't mess with "stuff" it is OK. Something to keep an eye on.



Sunday – 6:15am

Dawn breaks. With, nondescript spiral note pad and Pilot G-2 07 pen

- Restart fldigi and flrig. I noticed the RF gain was zero. The default (?) starting point of flrig. Fixed @ KX3.
- I worked ONE station first thing (6:15am) and then four (4) QSO's back to back at about 9am.
 - How late were stations on Saturday night?

Sunday - 10am -- QRT

- KC3FL was my first APE QSO on 20M QRP (10 Watts) and my last APE QSO on 40M at 110 Watts.
- APE Summary:
 - The weather was GREAT.
 - The QSO's were FUN.
 - Once I got PSK working, it all worked.
 - It was great having a co-APE, even if Fred didn't work the radio, he was there for the fellowship, the "spare parts", and as a co-Campmaster.
 - The radio "test".
 - The food. Camp food is always good. "There is no cholesterol in the woods."
- Next TIME:
 - APE again more bands.
 - I did try 30m no activity.
 - The 10M antenna on the 4x4 did not have a good match?
 - Mouse rather than touch pad on laptop.
 - Small desk lamp for early morning. Thanks Fred. (he went back to sleep) To be able to see the front controls on the KX3.
- Nice:
 - The Powerwerx.com SS-30DV power supply worked like a champ.
 - The Hardened Power Systems USB Multi-Tap provided 12V DC to USB 3A provided power to the USB fan on the KXPA100 amp and to the USB LED lamp used in the morning so Fred could go back to sleep and I did NOT need the overhead lights to be on.
 - Autek Research Rx Vector Analyzer VA1 very helpful setting up the antenna loading coil - band taps.. VNA in the future?
 - Fldigi simple but effective logging program. I can tell when I have worked a station before.
 - The KX3-KXPA100-FAN combo will run 110 Watts "key down" with a good fan.
 - Internet
 - A/C
- Backup Items:
 - WB3LGC 20AHr LiFePO4 13+ Volt battery system with 25 Watt solar panel.
 - WB3LGC 60AHr LiFePO4 13+ Volt battery system with a REDARC DC-DC 25A charger (isolated charging while driving).
 - Run the Dometic CFX50W fridge-freezer that stayed in the 4x4.
 - More Pilot G2 pens...
 - A copy of my medical records, just in case. Fred knew where they were.
 - The buildings also have AED's (automated external defibrillators).

Sunday – 2:30pm

- We locked up the camp buildings, Heading Home
- RT-1 is bumper to bumper this is the 65MPH toll road and we were doing 40MPH.

- Sunday beach traffic we normally leave camp by 11am...
- Most do more than 65 ... there a few times when they could.
- I might have done just as well on RT-13 (free).
- I was home by 4pm, in time to go to church.
- My Support Staff, YL KB3FMT, made a great dinner and the "kids" (KB3LUF & KB3MEI) dropped by to partake in dinner, too.
 - It would be nice if the kids would be more "radio active".
- Ice Cream "Sunday"
- BED

NR3I APE LOG - Akridge Scout Reservation - BSA, Dover/Camden, DE FM29fd

DATE_ON ZULU	CALL NAME	FREQ MODE RSTX RSTR
20230818 223700	KC3FL John	14.071180 PSK31 599 599
20230818 224600	N7WE	14.071180 PSK31 599 599
20230819 005500	UR4MLS	14.072000 PSK31 599 599
20230819 011400	KA0EGE	14.070805 PSK31 599 599
20230819 012500	VA1CM	14.070804 PSK31 599 599
20230819 122000	KC9UR	14.071480 PSK31 599 599
20230819 144600	W1VSX Dave	14.071135 PSK31 599 599
20230819 150100	KA4UPI Mark	14.071138 PSK31 599 599
20230819 152400	WA5AMM	14.071699 PSK31 599 599
20230819 154100	WO9B	14.071691 PSK31 599 599
20230819 160700	WA7YDM Jay	14.071201 PSK31 599 579
20230819 165600	AB9CA Dave	14.071704 PSK31 599 599
20230819 192500	VY2PLH Bernie	14.071890 PSK31 599 599
20230819 193200	N5SLY Lee	14.071385 PSK31 599 599
20230819 195200	DG1DPN Rolani	14.071274 PSK31 599 599
20230819 204400	AA9UF	14.070998 PSK31 599 599
20230819 221600	KC9UR	7.072080 PSK31 599 599
20230819 222600	KB9ZDD Mike	7.071397 PSK31 599 599
20230819 225100	W3BUG John	7.071130 PSK31 599 599
20230819 231800	VA3TPS Steve	7.071004 PSK31 599 599
20230819 233000	W3HF Steve	7.070999 PSK31 599 599
20230820 002100	N5SLY Lee	7.070991 PSK31 599 599
20230820 002900	KO4CVU	7.071868 PSK31 569 599
20230820 003400	K4VBR Richie	7.071279 PSK31 599 599
20230820 004900	KG0LH Bruce	7.071259 PSK31 599 599
20230820 010100	KG4Q Larry	7.071239 PSK31 599 599
20230820 102600	VY2PLH Bernie	7.071498 PSK31 599 599
20230820 115731	KC9UR	7.071005 PSK31 599 599
20230820 125001	KC4LZN	7.071503 PSK31 599 599
20230820 125637	N7WE	7.070699 PSK31 599 599
20230820 130236	W8VYM John	7.070699 PSK31 599 599
20230820 131244	W4UOC Tom	7.070699 PSK31 599 599
20230820 131723	KC3FL John	7.070699 PSK31 599 599

Signed: Stephen M. Shearer NR3I 21-AUG-2023