

Repeaters and Trunking Systems

ARKAN MEETING

March 22, 2004

AGENDA

Club members sign in for drawings Call meeting to order Acknowledge and welcome visitors

Program Repeater operatons by Elwin Phillips, KD5WY

Business Meeting Reading of the minutes from February Treasurer's report

Old Business ARKAN station construction Event chair reports AIRFEST chair appointment

<u>New Business</u> Special Event Station Door prize drawings Meeting adjournment

VE Testing To follow meeting

NEXT MEETING

Monday, April 26

Repeater operations is the subject of the next meeting. How they work, good operating proceedures and the future of 2m repeater usage.

ARKAN meets at the Arkansas Air Museum at Fayetteville Municipal Field each fourth Monday of the month at 7 p.m. Elwin Phillips, KD5WY, is the trustee of the 146.955 repeater, and he will join us at the March meeting to present a program on the inner workings of repeater systems. Elwin has worked in the two-way communications industry for several years, and will also share some insight into trunking systems. Bring your repeater questions.

Pres Note

Spring time is upon us and the weather is starting to get nicer. It's time to get the Klub station on the air and finish up our station area at the museum. Efforts will be stepped up in April to get the HF station, and VHF packet station on the air so they can be operated for our Second Saturday workshops and other events we choose to participate in. I am also committed to getting the Klub's tower raised this spring and will be asking for help so this can be accomplished. I would like to make our Klub's on-air presence felt this year at the museum through various events and hope everyone will join us in participating at the Airfest, Field day 2004, and J.O.T.A. events and making them even better than last year.

73, John, KD5NFX

Late breaking news: SSC approved

Section manager Dennis Schaeffer reported in his February section news that the ARKAN special service club application had been approved. Official word from ARRL should be expected soon, and everyone in the club should be congratulated. The efforts of everyone in building ARKAN over the past almost three years has made this possible.

ARKAN on the web at: www.arkan.us

PUBLIC SERVICE EVENTS CALENDAR

The following organizations have asked for amateur radio operators to support their events. Please contact the persons listed.

APRIL

Heart Walk April 3 Each year the University club works with the American Heart Association to assist with communications. The last event ARCUA's famous advisor, W5GOE, worked before succumbing to his own heart troubles was this event, and it is worked as a memorial by the club members. CONTACT: Bill Smith k1ark@arrl.net

Ozark Challenge Apr. 17-18 This is another great opportunity to work in the Ozark National Forest. The challenge is a three-day endurance "adventure" relay. Operators are needed for shifts or for the entire weekend.

CONTACT: Rusty, N5ZMW rustytwr@cox-internet.com

JUNE

AIRFEST 2003 June 19-20 This is another great opportunity to work. Volunteers will assist with gates and parking communication, as well as general flight line contact with the show announcer. CONTACT: Bill Smith k1ark@arrl.net

AMATEUR RADIO EVENTS CALENDAR

Keep in mind these events coming up.

APRIL

Fort Smith Hamfest April 3 Starts at 8:30 a.m.; Columbus Acres off Highway 71 South. For more info: www.hangingjudgehamfest.com CONTACT: Mark Clayton 479-648-9343

Joplin (Mo) Hamfest April 9-10

Arkansas Radio April 23-24 Emergency Service Hamfest Little Rock Expo Center -- Exit 128 off I-30 West; Fri., 4-8 p.m.; Sat., 8 am-4 p.m. For more info: www.aristotle.net/~hamfest CONTACT: James Blackmon 870-246-7833

MAY

Dayton Hamvention May 18-20

March Meeting Notes

We need racks, cabinets for AA5AR installation

ARKAN is needing one or two enclosed racks (something similar to a computer networking equipment cabinet with a see through front door) to mount some of our klub station equipment in at the museum so it will be secure when its unattended. Short, or tall racks could be used. If anyone knows where a rack or cabinet of this type can be obtained either through donation to the klub, or for a small fee please contact any of the ARKAN officers listed in this newsletter.

Speaking of AA5AR – thanks for the assistance

Club president John Robinson would like to thank, John Koch, N5QDL, for donating an AEA TNC to ARKAN for our 2m packet station we will be bringing on line very soon.

Event chairs for 2004 set for two of three projects

President John Robinson appointed chairs for two of ARKAN's major projects. Don Banta, K5DB, will be the club point of contact for JOTA. Steve Barrington, N9NSO, will head up the field day operations. A chair for the AIRFEST effort is needed ASAP.

We need suggestions for meeting topics, Second Saturdays

The April program is wide open, along with topics for the later part of the year. If you have an area of expertise -- or you want to learn about a certain area of amateur radio and would like to see an expert brought in -- please share them with the club's board during the March meeting.

Also, John Robinson is asking for more ideas for the Second Saturday program. This is a great initiative, and we need to support John with volunteers to take some of the load. Worked All Arkansas Net goes year round

Thanks to the growing participation in the Worked All-Arkansas net, net organizer Don Banta, K5DB, announced the net will continue operations after March. Originally planned as a winter operating event. For those working on their Worked All Arkansas award, this is a great place to start. Tune in Saturday evenings on 3.9875 after the conclusion of the Razorback Phone Net.

Don has also created a one-page information sheet on the net that can be found on the club website, www.arkan.us, as well as on the Arkansas section site.

And as Don said in his recent email updating the status of the net: Vy best 73, and thanks to all of you for helping a small vision turn into a now ongoing reality.

Your radio memories

Do you remember how excited you were about that first DX contact? Or your 50th state? Or your first night on an active storm net? Share them with us for the monthly newsletter. Email your radio memories to newsletter editor Bill Smith for inclusion in upcoming issues. We have lots of newcomers to the hobby in the club, and they would benefit from your experiences.

CONTACTING YOUR BOARD MEMBERS

John Robinson, KD5NFX Bill Smith, K1ARK Mose Howard, KB5BV Ted Flynn, AD5ON Steve Barrington, N9NSO Kevin Thornton, K5KVN

President John Robinson KD5NFX 11201 Doyle Road Winslow, AR 72959 H-479-839-8112 C-479-790-7574 johnr83@alltel.net President Vice President Treasurer Secretary At-Large Board Member Past President

Vice President/Newsletter Bill Smith K1ARK 3032 Strawberry Fayetteville, AR 72703 H-479-443-9450 W-479-575-3618 k1ark@arrl.net johnr83@alltel.net k1ark@arrl.net kb5bv@arrl.net ad5on@arrl.net n9nso@arrl.net k5kvn@arrl.net

Treasurer Mose Howard KB5BV 1775 N. Hunters Ridge Fayetteville, AR 72701 H-479-571-8470 W-n/a kb5bv@arrl.net Secretary Ted Flynn AD5ON 1903 S. Finger Rd. Fayetteville, AR 72701 O-479-521-0008 C-479-957-5155 ad5on@arrl.netl

YOUR ARRL EC REGION OFFICIALS

District L DEC Bill Smith, K1ARK K1ARK@arrl.net Washington County EC Bill Smith, K1ARK K1ARK@arrl.net Washington County Assistant ECs Dan Puckett, K5FXB danp@uark.edu University of Arkansas liason Kevin Thornton, K5KVN K5KVN@arrl.net Overall operations Randy DuCharme, AD5GB AD5GB@arrl.net Digital coordinator

Benton County EC Brad Clement, KJ5YD kj5yd@arrl.net Benton County Assistant ECs Mike Engelke, KD5DGT, Siloam Springs Bob Kendal, K5KBK, Digital coordinator

Carroll County EC Marshall Turner, K0ADM mturner@mynewroads.com

Madison County EC Currently vacant and seeking nominations



UPDATE YOUR INFO

A quick note to all Washington County ARES members: Please update your database info as soon as possible. Folks move, change jobs, change phone numbers (in particular cell phone numbers), upgrade licenses or equipment and we need to know. If you have had a change since you filled out your ARES form, please contact one of the members of our county ARES leadership team.

The Weather Report

W5YM University WeatherNet info from Bill Smith, K1ARK Great Turnout for Storm Spotting Class

It took two tries -- thanks to the bad weather in February -- but the second time was without a doubt the charm as a record crowd turned out for the Tulsa National Weather Service's annual spotter training.

Over 75 persons attended, and the chief forecast meteorologist George Matthews commented that it was one of the largest county meeting he had conducted.

Two of the three local newspapers and two of the three local television stations had reports on the meeting, which adds to the raising of awareness of severe weather. The region's National Public Radio station, KUAF, featured the meeting in its weekly newsmagazine, Ozarks At-Large. **The New Spotter Guide; New Spotter Cards**

An updated edition of the county storm spotter guide is available. Copies were handed out at the meeting to those who were there, but if you missed the meeting, please contact me for your own copy. Among the very useful items included: a four-state county-level map, detailed state county maps for Arkansas and Oklahoma, scales for estimating wind and hail size, frequencies for area nets and operating proceedures. There are also a lot of good basic meteorology.

Tulsa NWS handed out the 2004 edition of their Spotter Cards. This is an excellent glove compartment reference item. Again, if you need one, please get in contact with me.

Tis the Season for Storm Spotting

We had our first active net for severe weather in February, and March is always the start for the serious weather. Are you storm ready? Have you made sure you have:

- -- Current copies of spotter guides
- -- Checked your fixed spotter positions (have trees grown up, or construction changed a view)
- -- Driven the backroads in your area to stay familiar
- -- Checked the batteries in HT's, GPS's, etc.
- -- Updated your contact info with ARES and with the regional SKYWARN website
- -- Made sure you can receive alerts in the event of a loss of power

Time to Revise, Renew your ARES info

While every issue I put the same reminder in to update your ARES info, for many of our members it has been over a year since they've revised their paperwork. The main reason for the form is to give the EC a resource list – both to contact volunteers and to make assignments.

So, if you moved, got a new home phone, cell phone – these are all reasons to fill out a new form. If you've upgraded your equipment, your license, your skills – another huge reason to make a new form. To further increase your chances of filling out the form -- it is attached to this month's newsletter again.

Have you signed up for ARRL EC Level I?

I can't stress how important the new on-line ARRL Emergency Communications course is to your future volunteer work. With the renewed grant funding for the course, it only adds to the importance to served agencies that you are a certified volunteer.

All ARRL members who complete the course receive a full refund of the cost thanks to the underwriting grant.

AREA HF NETS

Arkansas ARES Net

Net Control: Dale Temple, W5RXU Weekly training net for ARES/RACES personnel. Anyone interested in emergency communications with HF privileges is encouraged to check in. Persons without HF are encouraged to monitor. Presentation from Sunday is repeated Monday. FREQ: 3.9875 (alt freq. 7.260) TIMES: Sunday morning, 7:00 local Monday evening, 7:00 local (following close of Razorback Net)

Worked All-Arkansas Net

Net Control: Don Banta, K5DB Weekly net for persons wishing to confirm and work counties for the club's Worked All-Arkansas Award. Follows the conclusion of the Razorback Net or 7 p.m. each Saturday until spring. FREQ: 3.9875

TIMES Soturda

TIMES: Saturday evening; 7:00 p.m. (following close of Razorback Net)

7 DAYS A WEEK

RazorbackPhoneNetFREQ:3.9875TIME:6:30 p.m. localOzarkCWFREQ:3.592TIME:7:00 p.m. local

2003 Arkansas QSO Results

2004 Arkansas QSO Party weekend set for late September; contest organizer seeking input on operating times

After more than lengthy time to make sure an address change didn't catch anyone's logs lacking, the 2003 Arkansas QSO Party results are compiled and a weekend for the 2004 event has been selected.

The contest organizer and sponsor, Bill Smith, K1ARK, has picked the last weekend of September, but is looking for suggestions on the operating time. Last year's date typo in QST led to a three-day weekend of operation. The upside was the chance for people to work at various times. The downside, obviously, was the spreading thin of operators on the air.

Again, the main complaint from those submitting logs was the lack of Arkansas stations on during the contest.

The previous two years, a Friday evening component to take advantage of the Razorback Net to jump start the participation. The contest ran daylight to the following Saturday evening's Razorback Net. Of course, last year a good part of the country thought it started Saturday and finished Sunday.

A Saturday start would put the contest in line with -- or conflict with -- the Worked All Arkansas Net. The Sunday operation does intrude into some folks church day.

Here are the suggested operating times & days (expressed in local time):

A) 6 p.m. Friday night to midnight; 8 a.m. Saturday to 7 p.m.

B) 6 p.m. Saturday night to midnight; 8 a.m. Sunday to 7 p.m.

C) 6 p.m. Friday night to 10 p.m.; 8 a.m. Saturday to noon; noon Sunday to 7 p.m.

Smith is taking opinions at the next two big events -- Fort Smith and Little Rock hamfests -- before turning in the final decision.

On with the results

Bill Dailey, WB5FKG made darn sure he had the overall score this time around with a "record" 43,321 points off 492 QSOs and 88 multipliers. The score obviously topped the single operator, low power, phone only division. WB5FKG's score was the most posted since this format for the party started in 2001. K1ARK was a distant second.

In the mixed mode low power, Chris Harris, W5MK, turned in a solid 10,276 for first. K7RB was second followed by K4MUT.

The high power goes to Arkansas' section manager, Dennis Schaeffer, W5MK. For the fourth straight year, W5YM and the Amateur Radio Club of the University of Arkansas were the top club scorer. As a result, W5YM won the right to be the 25-point bonus station for the 2004 event.

Only 12 operators turned in logs, down from the previous year's 18.

OVERALL TOP OPERATOR -- ALL DIVISIONS, ALL MODES -- Bill Dailey, WB5FKG

Top operator, SOLP, Phone Only: WB5FKG

Runner-up: K1ARK; Third: N5YLE

Top operator, SOLP, Mixed: W5MK

Runner-up: K7RB

Top operator, SOHP, Mixed: W5RZ

Top club: W5YM

Top operator, 1 Call Zone: N0WY

Top operator, 4 Call Zone: K4MUT

Top operator, 4 Call Zone, phone only: WA4VAP

Top operator, 8 Call Zone: W8KNO

Top operator, DX: VA3IX

ARKAN CALENDAR

Take a look ahead at upcoming meeting dates and program topics

MARCH

Repeater Operations	Mar. 22
APRIL Open Program	Apr. xx
MAY Field Day	May xx
JUNE Open Program	June. xx
JULY Open Program	July xx

AREA 2 METER NETS MONDAY

W5YM Unviersity WeatherNet

Net Control: Bill Smith, K1ARK Weather spotter group for Washington County, Arkansas; Information for emergency communications. FREQ: 147.135 + (no tone) TIME: 8:00 PM local **TUESDAY**

Washington County ARES

Net Control: Ted Flynn, AD5ON Weekly instruction and meeting for members of Washington County ARES FREQ: 146.955 - (pl 110.9) TIME: 8:00 PM local WEDNESDAY

W5YM Traffic Net

Net Control: Rotational among students Weekly meeting for members of Amateur Radio Club of the University of Arkansas. Open to all licensed amateur operators FREQ: 147.135 + (no tone) TIME: 8:00 PM local

THURSDAY

ARKAN On the Air

Net Control: John Robinson, KD5NFX. Weekly meeting for ARKAN and traffic handling. Followed each week by a trader net for local hams. FREQ: 146.955 - (pl 110.9) TIME: 8:00 PM local Benton County Radio Operators FREQ: 145.290 -TIME: 7:00 p.m. Thursdays Benton County ARES/RACES FREQ: 145.290 -TIME: 7:30 p.m. Thursdays TARC Triple T Net -- TARC System FREQ: Your nearby TARC linked repeater TIME: 9:00 p.m. Thursdays

Antenna Masts – made cheap

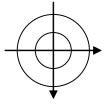
by John Robinson, KD5NFX

I hear a lot of people ask about inexpensive ways to mount lightweight antennas such as J-Poles or something similar and thought I would share an idea I have used for many years. Electrical EMT (metal conduit) comes in 10' lengths, in many diameters, is fairly lightweight, and is fairly inexpensive compared to other types of masts. Metal EMT can be purchased at most home supply centers and hardware stores also. I normally use two pieces of EMT to make a 19' mast and this works great for most VHF/ UHF antennas and could be used for most any lightweight type antenna.

Purchase two pieces of conduit, one piece should be 2 inches x 10' and the other should be 1.5 inches x 10'. Slide the smaller diameter conduit 12 inches into the larger one (this is how you end up with 19' instead of a full 20'). Drill a hole all the way through both pieces of conduit in the 12 inches of overlap area. Drill a second hole all the way through both pieces of conduit in the 12 inches of overlap area at a right angle to the first hole.

Now insert two bolts with lock washers and nuts though the two holes you just made, so that the bolts form a X through the conduit (orientation is show at the bottom of this article). When the bolts are tightened they will take the excess "wiggle" out of the conduit forming a rigid 19' mast that costs about \$10.

Below is a top view of the mast and shows the X pattern the bolts will make through the conduit when done:



ARKAN address

The club has a post office box to serve as the official address of the organization: ARKAN P.O. Box 9701 Fayetteville, AR 72703

Amateur Radio Klub of the Arkansas Northwest

Treasurer's	Report				
Balance	e Forward				525.90
2/18/04	. L	JS Post Office Box Rent	38.00		
2/23/04	. A	RRL VE Fee	24.00		
3/09/04	. C	Deposit		94.00	
Balance	e, 3/15/2004				557.90
Note: T	here's \$5.00 i	ncluded from K5DB for the	e tube mascot late fee.		
Thonk Mooo					

Thank, Mose

Amateur Radio Klub of the Arkansas Northwest Membership Application

Personal Information:	New Ap	pplication	_Yearly Membe	rship Renewal Application
Applicants Name:		Callsign:		Class:
Age:	ARRL Member: YES NO	ARES Member: YES	S NO	
Spouse's Name:		Callsign:		Class:
Other household members hole	ding licenses:			
Name:		Callsign:		Class:
Name:		Callsign:		Class:
Street Address:				
City:			State:	Zip Code:
Home Phone:	Work Phone:	Ce	IPhone:	
Email Address:		Personal Web Site:		
Membership in other organization	1S:			
Interests: VHF/UHF Y / N	APRS Y / N Packet Y / N Sate	ellite Y/N ATV Y/N Spe.	Events Y / N	ARES Y/N SKYWARN Y/N
HFY/N Phone	Y / N CW Y / N Digital Modes	s: RTTY Y/N PSK31 Y/	N Contestin	g Y/N
Other Non-Amateur Interests:				
Please attach a copy of amateu	ır radio license(s) for all those app	lying for membership.		
Dues are \$20.00 for first club m	nember and \$5.00 for each additior	nal family member.		
	ate termination of membership in		Di	ate
Sponsored by (Print)	Signa	ature		Date
	Board	d of Directors Approval		
License attached: Y/N	Dues Payment	Attached: Y/N	Amounto	fPayment:\$
License attached: Y/N			Amounto	fPayment: \$
License attached: Y/N		Attached: Y/N	Amounto	
	RECEI	PT FOR ARKAN DUES		Date:
Received from:	RECEI	PT FOR ARKAN DUES	Callsign:	Date:
Amount:	RECEI	IPT FOR ARKAN DUES	Callsign:	fPayment:\$
Received from:	RECEI	IPT FOR ARKAN DUES	Callsign:	Date:
Received from:	RECE	IPT FOR ARKAN DUES	Callsign:	Date:

ARKAN Worked All-Arkansas Award Work Sheet

To qualify for the Worked All-Arkansas Award, a station must have written verification of QSOs -- any band or mode -- with all 75 counties of the state of Arkansas. Please fill in the application sheet below, and return the completed application plus a \$5.00 award certificate fee to: ARKAN, P.O. Box 9701, Fayetteville, AR, 72703. All applications must be verified and signed off by two current officers of a registered ARRL club, or by presentation of cards with form. If sending cards, please include return postage.

COUNTY	CALL	TOWN	BAND	COUNTY	CALL	TOWN	BAND
ARKANSAS _				– LAWRENCE –			
ASHLEY _				– LEE –			
BAXTER _				– LINCOLN –			
BENTON _				_ LITTLE RIVER _			
BOONE _				– LOGAN –			
BRADLEY _				LONOKE _			
CALHOUN				MADISON			
CARROLL				MARION			
CHICOT				MILLER			
CLARK				MISSISSIPPI			
CLAY				MONROE			
CLEBURNE				MONTGOMERY			
CLEVELAND				NEVADA			
COLUMBIA				NEWTON			
CONWAY				OUACHITA			
CRAIGHEAD				PERRY			
CRAWFORD				PHILLIPS			
CRITTENDEN				PIKE			
CROSS				POINSETT			
DALLAS -				POLK -			
DESHA -				POPE			
DREW -				PRAIRIE -			
FAULKNER -				- PULASKI -			
FRANKLIN -			. <u> </u>	- RANDOLPH -			
FULTON -				ST. FRANCIS			
GARLAND -				- SALINE -			
GRANT -				- SCOTT -			
GREENE -				- SEARCY -			
HEMPSTEAD -				- SEBASTIAN -			
HOT SPRING -				- SEVIER -			
HOWARD -				- SHARP -			
INDEPENDENCE				_ STONE _			
IZARD							
JACKSON				_ VAN BUREN _			
JEFFERSON				WASHINGTON			
JOHNSON				_ WASHINGTON _ _ WHITE _			
LAFAYETTE				WOODRUFF			
				_ WOODROFF _ YELL _			
I certify the conta							

 I certify the contacts listed above as correct by visual inspection of the confirmed written QSOs, and I am a duly elected Ark. ARRL club officer.

 #1 PRINT NAME:
 CLUB:
 SIGNATURE:
 DATE:

 #2 PRINT NAME:
 CLUB:
 SIGNATURE:
 DATE:



Amateur Radio Klub of the Arkansas Northwest Post Office Box 9701 Fayetteville, Ark. 72703