

NOARS LOG

Our 51st Year serving the Amateur Radio Community of Northern Ohio.

Northern Ohio Amateur Radio Society

Volume 51, Issue 10

October, 2015

October 2015

SUN	MON	TUE	WED	THU	FRI	SAT
				Weekly Net 8p NCS: W8RET	2 *ARN 7PM	3 S.E.T.
4	5	6 10M Net 8p NCS: W8KYZ	7 *ARN 8PM BRTN 9:30p	8 Weekly Net 8p NCS: W8KYZ	9 *ARN 7PM	10
11	12	13 10M Net 8p NCS: NC8X	14 *ARN 8PM BRTN 9:30p	Weekly Net 8p NCS: KD8VTX	16 *ARN 7PM	17
18 VE Testing ARC Conneaut Hamfest	19 Membership Meeting	20 10M Net 8p NCS: NQ8T	21 *ARN 8PM BRTN 9:30p	Weekly Net 8p NCS: N8CX	23 *ARN 7PM	24
25 Massillon Hamfest	26	27 10M Net 8p NCS: NC8X	28 *ARN 8PM BRTN 9:30p	Weekly Net 8p NCS: N8CX	30 *ARN 7PM	

Fall is here and it is time to winterize our stations in preparation of the long cold winter that is predicted. As reported on Page 6, we were able to work on our antennas at the repeater site which will provide us with a worry free winter.

Thanks to those who stopped by our table at the Cleveland Hamfest especially those who supported our FTM-I00DR raffle. (See Page II.) We also gained a few new members. (See Page 5.) There were even two renewals. Thank you to KA8VTV John, and K8AET Dan who was a VE member and decided to continue his membership. Our membership roll is at I23 now. Speaking of renewals, it is time to start thinking about renewing for 2016. Don't wait until the last minute.

There are plans to improve our repeater systems even more in the coming weeks if Murphy will stay away. Stay tuned.

73, Carl W8KRF

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Northern Ohio Amateur Radio Society K8KRG



161 Herrmann Drive, Avon Lake OH 44012 E-mail: noars(at)noars(dot)net

Award Winning Newsletter of: The Northern Ohio Amateur Radio Society



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The Northern Ohio Amateur Radio Society

Is a Public Service Organization with the purpose and goal to enhance the Amateur Radio Service through Public Service, Education, and Fellowship.

Mission Statement:

- Meetings are held at 7:00 p.m. sharp on the third Monday of every month at the North Ridgeville Branch of the Lorain Public Library, 35700 Bainbridge Rd, North Ridgeville, OH. The meetings are open to the public and all are welcome. Tune in to the 8 pm Thursday night NOARS net on the 146.700 MHZ. repeater located downtown Elyria, Ohio for changes or updates in this schedule. N.O.A.R.S. Repeaters can be heard at 146.700 (-) PL 110.9 & 444.800 (-) PL 131.8 in Elyria, OH, as well as, 145.150 (-) PL 110.9 in North Royalton, OH.
- Regularly scheduled NOARS nets are every Tuesday night at 8 pm on 28.370 MHz, and every Thursday night at 8 pm. for the rag chew and technical discussion net on 146.700 MHz. All licensed amateurs are welcome. NOARS membership is not necessary to participate. In fact all participation is encouraged and appreciated.
- NOARS can be found on the World Wide Web at: http://www(dot)noars(dot)net
- NOARS Hosts two hamfest/computer shows annually. The winter hamfest in early March and the summer classic NOARSFEST hamfest and computer show in mid-July.

Membership is open to anyone interested in communications. The dues schedule is: Full \$15, Associate \$7 (non-licensed), Family members of a full member are only \$4 ea. Make checks payable to NOARS and mail them to:

NOARS Membership Committee, 161 Herrmann Drive, Avon Lake, OH 44Ø12

Or use PayPal by sending your <u>personal</u> payment to paypal(at)noars(dot)net.

Who's who at NOARS? (and how to contact them)

2015 Elected Officials

President: Clark Beckman N8PZD — President2015 at noars dot net **Vice President:** Alex Pasini N8QL — vicepresident2015 at noars dot net **Treasurer:** Thomas Porter W8KYZ — treasurer2015 at noars dot net **Secretary:** Darlene Ohman KA8VTS — secretary2015 at noars dot net

K8KRG License Trustee

Al Moriarty N8CX — trustee at noars dot net

Committee Heads for 2015

Newsletter: Carl Rimmer W8KRF — noars at noars dot net

Education Chair: Alex Pasini N8QL — education at noars dot net

ARRLVE Team: Tom Porter W8KYZ

Carl Rimmer W8KRF Joseph Cebula W8GWD

Alex Pasini N8QL Bill Isenberg K8IC Steve Hill NQ8T Joe Oney W8SSE Jane Reed K8JGR Brian Kellison AC8RV

David O'Connor II KD8MXE

Membership: Carl Rimmer W8KRF — info at noars dot net

DX/Field Day Chair: Al Moriarty N8CX

Net Operations Mgr: Robert Tome W8RET

Hamfest Chair: Darlene Ohman KA8VTS

Website: Carl Rimmer W8KRF — website at noars dot net

Sunshine: Darlene Ohman KA8VTS - sunshine at noars dot net

Repeater Upkeep: Carl Rimmer W8KRF

Clark Beckman N8PZD

Bill Isenberg N8IC Tim Allen NC8X Tom Porter W8KYZ

Parliamentarian: Robert Tome W8RET

Roll Call: September Meeting Attendees						
27 Members And Guests In Attendance						
KD8TCZ	KA8VTS	W8KRF	W8KYZ	N8QL		
N8PZD	W0KM	K8AGW	KD8WON	K8KIZ		
W8KFJ	W8IMO	W8NNC	WIAFC	W8RET		
N8AUC	NC8OS	W8SSE	KD8VTX	W8GWD		
KB8ZUN	K8IC	K8HRD	WB8WAA	KB8WUA		
NC8X				KF8PM		

Minutes of the September 21, 2Ø15 Meeting Submitted by: Darlene Ohman, KA8VTS

The meeting began at 7:00 p.m., 27 members and guests present.

Treasurer's Report: Tom Porter, W8KYZ, a motion was made and seconded to accept the treasurer's report as printed in the newsletter.

Secretary's Report: Darlene Ohman, KA8VTS, a motion was made and seconded to accept the secretary's report as printed in the newsletter. The motion was passed.

Education Committee: Alex Pasini, N8QL, we are going to hold off on having a class because of another opportunity which I will explain the details later.

Newsletter: Carl Rimmer, W8KRF, I would like to find someone that is willing to take over doing the newsletter. Send me your input no later than the last Monday of the month. I can always use more things to put in the newsletter.

Membership: Carl Rimmer, W8KRF, we are up to 120 members. If any member is turning 75 this year or already turned 75 and has been a member for 5 years consecutively. You are then deemed a Special Life Member and no longer have to pay dues.

Nets: Bob Tome, W8RET, the 2 meter net is going up and down and the 10 meter is pretty consistent.

Sunshine: Darlene Ohman, KA8VTS, I have nothing to report. Please contact me if you know of someone who passed away or is in the hospital.

Web Site: Carl Rimmer, W8KRF, if you have anything that you want on the web site, please let me know.

DX: Al Moriarty, N8CX, was not in attendance.

Repeaters: Carl Rimmer, W8KRF, the repeaters are all working well. Alex, N8QL, found a person to climb the antenna and repair it. A motion was made and passed for the repeater committee for up to \$500 to pay for the climber and parts to repair the repeater.

Old Business:

None

New Business:

Xmas Banquet: The banquet will be held on December 5 at Sugar Creek Restaurant. The cost is \$16.00 each which includes a salad bar, a beverage and your selection of one of several entrees. Please plan to come. Link to make your reservation is on the website. You can also call Tom at 444-930-9115 or Carl at 216-256-9624. Payment in advance is required.

Winter Hamfest: The Winter Hamfest will be held on March 6, 2016.

ARES, Eric Jessen, N8AUC: The new Emergency Coordinator for Lorain County is **Tim Lovejoy, NC80S**. The Simulated Emergency Test (SET) is **Saturday, October 3**. Call up will be on the 146.625 repeater.

Next month is nominations.

The meeting was adjourned at 7:44 p.m.

The program was a presentation by **David WIAFC** on Propagation. Thank you David for helping us understand how and where our signals go. Next month's program will be presented by Chet K8KIZ on component testing.



BTW Dept.!

Happy Birthday to the following members:

* KD2HCE Chris * K8AET Dan * WB8UPA Russ * W0KM Kirk * KD8CQ John * * KD8KAA Gary * AC8LL Joseph *

Ed. Note: If your birthday is this month and your name doesn't appear here it's a good chance that it's not in our database! Please contact: Carl W8KRF and update us!

NOARS Has Two Nets For You!

On: 146.700 MHz Repeater, and 28.370 MHZ

The 8:00 PM Tuesday Night 10 M Net

Join Tim, NC8X, Tom W8KYZ, and Steve NQ8T for this net.

The 8:00 PM Thursday Rag Chew / Tech Net.

Join us for our weekly 2M repeater rag chew and tech net Hosted by W8RET - W8KYZ- N8CX - KD8VTX

Our repeater will be used by Burning River Traffic Net on Wednesdays at 9:30 PM.

A Few of the Call-Signs Heard On the NOARS Nets

August 2015

Tuesday and Thursday Nets

K8AGW - K8RWC - KB8WUA - KB8ZUN - KC8FQV - KC8SZF - KD2HCE - KD8MUF - KD8QIO - KD8VOY - KD8VTX - KD8WON - KD8WPE - KF8PM - KY8OSU - N8CX - N8PZD - N8WS - NC8OS - NC8X - NQ8T - W0KM - W8GET - W8GWD - W8KRF - W8KYS - W8KYZ - W8RET - W8UM - WA8ERA - WA8YVF - WB8UPA - WD8OSJ

Welcome to 4 new members who recently joined our ranks.

W0KM Kirk, KC0DSR Pam, KE8ALW Tom, and KE8ALV Marty who all live in Olmsted Township. Tom and Marty received their tickets after taking instruction from Kirk. They are members of the Olmsted Falls CERT, so they come to us with a background in Emergency Preparedness and now ECOMM. Kirk attended our September meeting at which time he and his wife, Pamela, joined. He has volunteered to assume the duties of newsletter editor once he gets on board. He has also offered to assist in our educational endeavors. We welcome all four and look forward to having them participating in our events and activities.

Christmas Banquet

It is not too early to make your reservation for the Christmas Banquet to be held at the Sugarcreek Restaurant, 5196 Detroit Rd, Sheffield Village, OH on Saturday, December 5, 2015. Reservations can be made on our website at http://www.noars.net/noars_016.htm. Follow the instructions. Payment must be made in advance.



The **October** meeting is a very important meeting in that it is 2016 Officer Nominations. The Nominating Committee will present a slate of nominees for President, Vice President, Treasurer, and Secretary. After the nominees are presented by the Chair, the President will call for nominations from the floor for each office. When the slate is complete, the Secretary will publish the list in the November newsletter. Elections will be held at the November meeting. Should the current officers be unopposed, the President will call for a white ballot. Please join us for this very important process. Your participation is requested.

October Meeting Program

One of our favorite presenters, Chet K8KIZ, will once again give us an enlightening presentation on a small, very cost effective, component tester kit which he has found. When built the kit will test most all components including transistors, resistors, etc., and comes with a LCD screen on a 3 x 3 platform powered by a 9v battery. If you have something to be tested bring it to the meeting.

The Repeaters

The Repeater Committee has made some very important progress with the repeaters in the recent weeks. Initially, measurements were taken on the 146.700 antenna system. The SWR readings were jumping all over the scale when the meter was placed between the duplexer and the jumper to the hardline connector. It was discovered that the jumper had a very poor connection. A slight tug pulled the connector completely off. Ken K8TV was there and just happened to have a new, high quality jumper with him which he donated. With the new jumper connected, the SWR is almost perfect as can be seen below.

146.700 MHz Stationmaster Antenna



145.15 MHz Beam Antenna



The 145.15 link radio is also installed and interfaced. The audio is not optimal but we will keep it on the air for now. There is a new link radio in the works. The link antenna is also showing a nice SWR as can be seen in the right plot above.

On Saturday, September 26, Kurt, a professional tower climber repaired our 444.800 MHz antenna by replacing the cable between the antenna and the hardline with a commercially fabricated cable. A check of the SWR at the jumper before the antenna indicated a 1.7:1. This is not ideal but is acceptable. On his descent, Kurt secured the hardline with #12 wire and reported that the hardline appeared to be in good condition.

Our next project is to install a power amplifier on the 146.700 machine. We have decided to purchase a used TPL PA3-IDE-RXR power amp from a local repeater owner who just upgraded his repeater system with newer amplifiers and offered his old PA to us at a very reasonable price. Keep tuned for updates on this project.







FOR THE NEWSLETTER...

Items submitted which might be of interest to our readers.

A Message From the Developers of Ham Radio Deluxe regarding the YAESU 857/897/817.

Yaesu has advised us to remove some of the controls from the 857/897/817 which were NOT directly supported by the firmware CAT command set.

We HAD to do this as the V5 and previous developers had added some of their own code that wrote directly to the flash ram on the rig, this has been causing the flash ram chips to fail, and Yaesu can no longer get replacement chips. So we have HAD to remove this kludge code and can only use the official CAT commands now.

We have taken this action to prevent damage to users radios. We would be negligent if we failed to take this action.

We strongly advise that you do not run any version prior to 6.3.0.410 otherwise you are risking destruction of the memory device, this will stop your radio from functioning.

You are free to discuss this with Chris Wilson at Yaesu USA.

Here is a list of the only cat commands that we are allowed to use can be found in the manuals for those radios.

Vietnam DXpedition

Great news from the **Mediterraneo International DX Club Team**. During their already announced Da Nang City, Vietnam, DXpedition with the callsign: **3W3MD** between October 31st and November 10th, the international team leading by Antonio, IZ8CCW, and Gabriele, I2VGW, will also be able to be active for some days from Cham Island IOTA S-162 (claimed only by 17% of IOTA chasers).

As a matter of fact, some operators will leave the main land for 3-4 days, and with two stations and a couple of antennas they will try to give the reference to many IOTA chasers as possible.

Of course the rest of the team (19 skilled DX operators coming from 9 countries) will be on air from the beach of Da Nang with five stations 24 hours around the clock. According to the evaluations that they have done, they are confident to give to a lot of DXers the possibility to work this country on the Low Bands, WARC and especially on the Digital modes.

Quite a bit of equipment and antennas are ready for the new adventure by the MDXC team. All the licenses are in hands of Ant and Gab and all have been already arranged (boat, generators, contacts....etc) for the transfer on Cham Island (AS-162). Save the dates and keep ears open because the callsign for the IOTA operations by the team will be **3W3MD/P**.

For Sale & Advertisement's Page

All Submissions must be sent to noarslog (at) noars (dot) net or to: NOARS Log, 161 Herrmann Drive, Avon Lake, OH. 44Ø12 Deadline for submissions is the Third Tuesday of each month. All must include Asking price, sellers name, call sign and phone number. Ads from current NOARS members (or paying advertisers) only will be accepted! Notice! All ads will be removed (unless updated) after three months (as space is needed)! NOARS reserves the right to refuse ads at our discretion.

FOR SALE (CALL TOM, W8KYZ, 440.930.9115)

()	. • ,
<u>ANTENNAS</u>	
6 METER HALO MT-1 (HI-PAR)	\$40.00
2 METER 3 ELEMENT YAGI (NIL-JOHN)	\$30.00
LARSEN NLA 440 COIL AND ANTENNA	\$ 5.00
" " 220 " " "	\$ 2.00
" " 146 " " "	\$ 5.00
" RAIN CAPS FOR MOBILE ANT.	FREE
" NLA-220 MOBILE COILS (NEW)	\$ 3.00
LIVI 130	\$ 5.00
HT (telescoping) antennas (aea/vocom)	\$ 3.00
Hustler G6-440, Base Vertical UHF	\$25.00
FREE TUBES CALL	
Free 2012 ARRL Field Day pin	
=======================================	
METERS CALL ALMOST FREE	
SIMPSON -TRIPOLET-HICKOCK-WESTON-U.S.NWESTINGHOUSE	
McCLINTOCK-YOKOGAWA-HEATHKIT (VU METER)	
=======================================	
440 COMMERCIAL MOBILE RADIO/ACCESSORIES (20 YEARS OLD)	
MOTOROLA MAXAR	
" 50	
" RADIUS	
" HT	
ENERGIZED AA /AAA DATTERY GUADOED	45.00
ENERGIZER AA/AAA BATTERY CHARGER	\$5.00
PRO TECH 701 AC/DC NICAD CHARGER	\$5.00
DIDOLE COAY	
DIPOLE COAX 65' holdon 2012 (rg. 9)	
65' belden 9913 (rg-8) 70' belden 8214	
60' R & L rg-8u	
75' rg-8u	
62' rg - 8u	
69' rg - 8u	
50' rg - 8u	
RG - 58A/U 25' (2 ROLL'S)NEW	
RG - 59U 48'	
RG - 59U SPOOLNEW	
NG 550 51 OOLIVE VV	



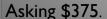
NOARS thanks MFJ Enterprises for their support of our Winter Hamfest and NOARSfest by providing catalogs, bags, and door prizes. When considering purchases of equipment or accessories, please check out MFJ first.

http://www.mfjenterprises.com/

Kenwood TM-D710A (Used)

Description: The TM-D710 Data Communicator 144/440 MHz Dual Bander has the following features:

- APRS Ready
- APRS Weather Station ready
- KSS II+ (Kenwood Skycommand II+)
- NMEA 0183 GPS I/O port
- Built-in 1200/9600 bps TNC
- Echolink Ready
- High RF Power Output (V/U: 50 watt)
- 1000 multifunction Memory Channels
- Dual Receive on same band (V+V, U+U)
- NOAA Weather Alert/RX (US Only)
- MCP Compatible with ARRL "TravelPlus"



With Original box and Manual







Chris - KD2HCE @ 216-759-3488, or KD2HCE@arrl.net

Still FOR SALE Kenwood TM-D710G \$450

Specifications

Covers 144-148 and 430-450 MHz transmit with 118-524 MHz (Band A)

136-524 MHz and 800-1300 MHz (Band B) less cellular receive

Dual receive, even on same amateur band

NOAA weather alert

1000 memory channels

50/10/5W output on both VHF and UHF

Kenwood's memory control software is compatible with the ARRL TravelPlus® CD.

APRS

Model name indication

Decay Algorithm: Send beacon on movement once the initial interval has been past. (Same as TH-D72)

Message Auto Reply: Apply new beep tone solely for auto reply. (Same as TH-D72)

Two point distance: Show more precise distance info. Show distance per 10 meter when distance is below 1 kilo meter. (Same as TH-D72)

General

Internal GPS on/off

Add waypoint

Waypoint List

Adding "GPS" on menu (Same as TH-D72)

GPS menu

PC output: selectable from 2.5 stereo GPS interface or mini DIN9 pin Datum: Selectable from WGS-84(US) or TOKYO (Same as TH-D72)

Sentence: on/off per item (\$GPGGA,\$GPRMC,\$GPGSV,\$GPGSA,\$GPGLL, \$GPVTG,\$GPZDA) (Same as TH-D72)

SBAS: on/off (Same as TH-D72)

Log: Record Method, Interval, Distance, Clear All Data, Wrap when full (Same as TH-D72) Target Point: Channel No, Name, Latitude, Longitude are all editable (Same as TH-D72)

New LCD indications / menu / windows

Internal GPS

Satellite info (Same as TH-D72)

Waypoint edit menu (Same as TH-D72)

Target point indication (Same as TH-D72)

Waypoint list (Same as TH-D72)

Other Features

RTC auto realignment: realignment will be done by using internal GPS (Same as TH-D72)

Pinning: GPS position will be pinned under 0.5knot so as to avoid scattered position/movement info. (Same as TH-D72)

Special features

Internal clock for APRS® (Automatic Packet/position Reporting System) time and date stamp

APRS functions: Sort; Filter, QSY; Decay algorithm; Proportional pathing; Speed and altitude beaconing, Weather beaconing with Davis® weather stations; Voice alert.

EchoLink® ready with ten dedicated channels

Built-in sound card interface; NMEA 0183 GPS I/O port.

Compatible with Kenwood's Skycommand System II+ when used with the TS-2000 series.

General Features:

- High RF Power Output (50W)
- 1,000 Multifunction Memory Channels
- Dual Receive on Same Band (VxV, UxU)
- EchoLink® MEMORY (Automatic Dialer)
- EchoLink® Sysop Mode For Node Terminal Operation
- Multiple Scan
- Invertible Front Panel
- Choice of 2 Backlight Colors (AMBER/GREEN) For The LCD Panel
- 104-Code Digital Code Squelch
- "FIVE-IN-ONE" Programmable Memory

Includes original box and manual

Contact: Carl W8KRF 216-256-9624 w8krf(at)w8krf(dot)net



For Sale

ICOM D-STAR	COST
IC-2820H New	\$ 599.95
IC-UT123 New	\$ 299.95
IC-92AD New	\$ 519.95
IC-HM175GPS Mic	\$ 349.95
IC-CP19R Cig Lighter Plug	\$ 48.95
IC-LC168 Carrying Case	\$ 29.95

ICOM

IC-7000 \$1,199.95 AT-7000 LDG \$ 169.95

KENWOOD

TM-D710A New (in box) \$ 589.95 Green Lab GPS Added \$ 100.00

Contact:

Bob Tome, W8RET (440) 365-6829

(Most of the above are new and still in box)
The prices are retail so call and make an offer

NOARS Fundraiser Raffle Yaesu FTM-100DR Transceiver

WINNER:

David Fisher, KY8OSU





From the sharpest corner of Ohio returns the

CONNEAUT AMATEUR RADIO CLUB

2015 HAMFEST

OCTOBER 18th

Located at the Conneaut American Legion 272 Broad Street Conneaut, OH 44030

Directions: I-90 to Conneaut Exit 241(SR7)
North on SR7, follow SR7 through town.
American Legion is on East Side of SR7 just North of downtown Conneaut.
Follow Hamfest Signs.

- Admission \$5.00(Children 10 and under Free)
- Vendor tables \$10 each(includes 1 entry ticket)
 - Doors open to public at 8:00AM
 - Vendors welcome to setup at 6:00AM
 - Mobile Check in 147.390 + PL 131.8
 - Parking on North side of building only
 - ARRL representative on hand
- Food and Refreshments by American Legion Auxiliary
 - Grand Prize- Yaesu FT-2900R 75W 2 Meter Mobile
 - 1st runner up Alinco DJ-500T Dual Band HT
 - 2nd runner up Yaesu FT-252 2 Meter HT
- Mobile Check in Prize- Comet Dual Band Mobile Antenna
 - Plus Multiple random door prizes
 - 50/50

For Information contact Mike Pongrass W8NEO kd8osj@yahoo.com 814-440-6679

55th Annual Hamfest and Auction Sunday, October 25, 2015

MASSILLON AMATEUR RADIO CLUB

Massillon Boy's & Girl's Club 730 Duncan ST SW, Massillon OH

Setup at 6:00 a.m. Doors open at 8:00 a.m. 13,000 sq ft : Handicap Accessible : All Indoors : Free Parking

ARRL APPROVED HAMFEST

Still just \$5.00 General Admission!

ARRL QSL CARD CHECKING AVAILABLE!

Under 12 Free. Admission Ticket good for all main and door prizes

Tables Rental only \$14.00 each. Free electric available on a limited basis

PRIZES

Main Prize Drawing at 1:00

1st Prize - Yaesu FT-8900

2nd Prize - MFJ 991B Tuner

3rd Prize - Yaesu FT60R HT

Need not be present for Main Prizes but must be present for all other prizes.

AUCTION

Auction begins at 10:00 a.m. 15%
Commission charged on all items
sold. You may buy back your own
items at no charge. MARC reserves
the right to limit the amount and/or
type of items sold at the Auction!
No Computer Equipment!

VE LICENSE TESTING AVAILABLE BEGINNING AT 9:00 AM

For more information or Reservations: Terry Russ - N8ATZ 3420 Briardale Dr. NW Massillon, OH 44646 Phone (330) 837-3091

Mobile Checkins & Directions on the 147.18+ Club Repeater Sale of Illegal Amplifiers or Adult Material is Strictly Prohibited

Contact us at truss@sssnet.com

WEB SITE http://www.w8np.org



****IMPORTANT****



Are you joining the ARRL? Did you know that NOARS will receive a commission if you do your transaction through us? Note: We are no longer processing renewals because of a poor cost/benefit ratio.

Commission Terms

ARRL Affiliated Clubs receive a commission for every new ARRL membership they submit to ARRL Headquarters.

Clubs retain \$15 for each new membership OR lapsed membership (of two years or more). A NEW MEMBER is defined as any individual who has never been a member of ARRL or any individual who has not retained a membership for two or more calendar years prior to the application submission.

If you are <u>not</u> an ARRL member, <u>please</u> consider joining now. As an affiliated Club, we are required that 51% of our membership be active ARRL members. If you are joining, contact Tom Porter, W8KYZ. **This is important**. You will gain benefits provided by being a member of the ARRL, and NOARS will receive some income to help support our activities and events, as well as our repeaters.