



NOARS LOG

Our
47th Year
Serving The
Amateur Radio
Community

www.noars.net

The Award Winning Newsletter of:
The Northern Ohio Amateur Radio
Society

Welcome to NOARS country!

September 2011

NOARS Meetings Are Held at the
Elyria Police Department Community Room
On The Third Monday
Every Month! @ 7:30 P.M.



V.E. Exam Schedule:
1 P.M. Third Sunday of each Month.
Elyria Red Cross, 2929 W. River Rd N. Elyria, OH

SUN	MON	TUES	WED	THUR	FRI	SAT
** FlexRadio Lecture and Demonstration by Dave, W8KFJ				1 Tech NET 8 pm. NCS: WB3JVK	2	3
4	5 Digi Net 145.15	6 1ØM Net 8PM 28.370+/-	7* NOARS NET 9 pm. NCS: WD8ADE	8 Tech NET 8 pm. NCS: W8KYZ	9	10
11 Findlay Hamfest	12 Digi Net 145.15	13 1ØM Net 8PM	14* NOARS NET 9 pm. NCS: K8HRD	15 Tech NET 8pm NCS: WD8IQJ	16	17
18 VE Testing 1PM Cincinnati Hamfest	19** NOARS Meeting	20 1ØM Net 8PM	21* NOARS NET 9 pm. NCS: KD8JAN	22 Tech NET 8pm NCS: K8RWC	23	24
25 Cleveland Hamfest	26 Digi Net 145.15	27 1ØM Net 8PM	28* NOARS NET 9 pm. NCS: KD8MUW	29 Tech NET 8pm NCS: W8ADV	30	* Amateur radio News-line 146.700

Presidents Message & Who To Contact	Pg 2	Contest Corner, DX and Got 6?	Pg 5
Roll Call - NOARS News (Please Read) – Rants N Raves	Pg 3	For Sale & Ad's Page – Happenings II	Pg 6
Meeting Minutes – Net Check-ins	Pg 4	NOARS Mission Statement - Happenings	Pg 7



The Northern Ohio Amateur Radio Society **K8KRG**



September, 2011 - Volume 47 Issue 9

Page 2

Welcome To NOARS Country

From the Prez-

It was nice seeing all of you who attended the 2011 NOARS picnic. Although we did not have as many as last year, the food was spectacular and a good time was had by all. We even had some live entertainment from Sandy W8KYS, who inspired many fond memories with his various renditions of some of our old favorites. Thanks Sandy for adding to our beautiful experience. Among those missed by us all was our club Elmer, Ray, W8ADV. We were hoping to give him a personal birthday wish. Ray turned 90 years young last month. Happy Birthday Ray.

I have been spending much of my ham radio time chasing and copying telemetry and SSTV pictures from ARISSat-1, which was the "space suit" satellite placed into orbit on August 4th from the ISS. I have been able to copy some telemetry which I forward to those keeping tabs on the "bird" and I have uploaded a few SSTV pictures I was able to capture using MMSSTV. I tracked ARISSat-1 using SatPC32 which was developed by Erich Eichmann DK1TB and available from AMSAT. I found it to be more stable and accurate both tracking and correcting for Doppler Effect than my once praised HRD Sat Tracker. ARISSat-1 is already experiencing battery failure and has been operating in Low Power Mode much of the time, even when in full sun. You can go to my website at <http://www.w8krf.net> to see my pictures, hear some of the recordings I have made, and access links to the ARISSat-1 website. It has been very exciting.

I hope many of you can make it to the September meeting, and participate in the nomination process. It is that time of the year to start thinking about who you would like to see at the front table in 2012. This is your organization and it can only be as good as you make it. We will also have a FlexRadio talk and demo by Dave, W8KFJ. Join us.

73,

Carl W8KRF

Carl F. Rimmer, W8KRF *President NOARS*
Write: *President2011*, 161 Herrmann Drive, Avon Lake, OH. 44012
Or E-Mail me at president2011@noars.net.

Who's who at NOARS?

2011 Elected Officials

President:..... W8KRF Carl Rimmer
Vice President:..... WB3JVK Steve Robbins
Treasurer:..... W8KYZ Tom Porter
Secretary:..... KA8VTS Darlene Ohman

K8KRG License Trustee

N8CX Al Moriarty

Committee Heads for 2011

Newsletter Production: W8KRF Carl (*Editor*)
WD8IQJ John (*Co-Editor*)
A.R.R.L. V.E..... W8KYZ Tom Porter
W8KRF Carl Rimmer
W8GWD Joseph Cebula
N8QL Alex Pasini
K8IC Bill Eisenberg
Education Committee: W8KRF, WD8ADE
Membership: WD8ADE Julie Wilmer
Property Manager: WD8BJY Doug Krucinski
DX/Field Day Chair: N8CX Al Moriarty
Net Operations Managers: K8HRD Harold Drake
Hamfest Chair: KA8VTS Darlene Ohman
Webmaster@www.don.noars.dot.net: W8KRF Carl Rimmer
K8JWS John Schaaf
Sunshine Committee: W8FJR Frank Reese (Temp)
Repeater Upkeep: WB3JVK Stephen Robbins
N8PZD Clark Beckman
Elmer Corp. Representative: W8ADV Ray Smith
Parliamentarian: K8WRS Dave Semanik

NOARS IS ON THE AIR!

Weekly Nets:

28.370 MHz Tuesday Night 10 Meter Net 8pm local time
NCS: NC8X

146.700 Wednesday Night Rag Chew Net 9pm local time
NCS: WD8OFG – WA8ADE – KD8MUW–WD8IQJ

146.700 Thursday Technical Discussion Net 8pm Local time
NCS: W8KYZ – WB3JVK – WD8IQJ – K8WRS

All are welcome on NOARS nets!

NOARS Digital Discussion Net
Mondays 8:00 PM
145.150 Repeater. NCS: WD8IQJ

NOARS NEWS

Rants N Raves

NOARS 2011 Banquet @ Sugar Creek this year!

12/03/2011

- Sugarcreek Restaurant, 5196 Detroit Rd, Sheffield Village, OH 44035 (440) 934-5059
- GPS Coordinates:
41.4236111/082.0736111
- This Holiday Banquet is held on the first Saturday of December each year.
- More Details to follow.

NOARS is new to Facebook!

Thanks to Carl W8KRF and the crew. NOARS is now a FACEBOOK group now! And now you can keep up with the latest NOARS news on this popular social medium.

Net News:

Congrats to W8KYS Sandy, the 500th check in on the Thursday Tech Net!

Net Statistics Y.T.D.

NET	QNI	QNI AVG	Stations Heard	# Nets
Tues. 10 M	302	8.88	37	34
Weds. R.C.	517	15.21	77	34
Thurs. Tec.	611	17.97	84	34
Totals	1430	14.02	198	102

**Which net looks like it's in line to rack up NOARS 1500th?
Stay tuned folks!**

(Just Rants And Raves From Cleveland)

Rave Department

What a nice picnic! I must say the weather looked a bit intimidating but once again NOARS weather gods prevailed. And even my atomic beans were survivable. (Albeit a bit *interesting* this year!) It was nice to see a lot of the familiar faces again. As well as a cadre of new faces. Sadly a few were missing and will be missed at future events as well. (I'm talking about the silent keys, not you guys who missed the best free feed in a long time because you had other things to do)!

Well the digital net on the other NOARS repeater (145.15) is progressing we are all discovering a few things. I would like to see some more demos of various modes and techniques.

The summer is starting to wind down. I'm hoping you'll get the antenna projects all buttoned down before that [*expletive deleted*] starts falling out of the sky.

Heard some wacky stuff the other day. 52.525 Mhz. was buzzing away with some FM OLIVIA(?) signals which were very skittish and indicative of skywave propagation. Even with the crummy vertical ¼ wave I have it was at times pouring in. well the point being... Six meters is like the summer winding down. But having been watching it all summer it was at times the DOMINANT band for DX. Europe, Asia and Trans-equatorial. All were in this year even Antarctica was heard! Reports are that next year will get even better for "The Fun Band". So if a six meter antenna/rig is not on the list for your station, it should be.

Rant Department!

OK! I've been thinking about a good rant for this month. It's been tough with as well as things around here have been going. Radios have been working good, antennas have been good and even the computers are relatively running ok (we are talking about XP? Right?) i

I was in scan mode the other day and heard (not on our repeater) some guy with an older call (1x3) lamenting about how ham radio has changed (for the worse) thanks to this and that... (We've all heard this conversation before right)? ...And that there are nothing but "Kids & Lids" on the air today. All with deplorable operating skills and practices. Just made him sick and that he would NEVER talk to these "Bozos"! *SIGH!* Well I happen to like Bozo! And it seems to me that the point was being missed. Isn't it our job as old timers (sic) to pass along our wisdom to the "Kids & Lids? Weren't we "Kids & Lids" at one time ourselves? We learned from the school of hard knocks. And no matter how good we think we are we all have a bit to learn! The guy got real disturbed when I pointed out to him. His filibuster lasted for 27 minutes and he timed out the repeater only 4X! BTW He neglected to identify his call once!

Silent Key Report

W8AWM - Albert "Butch" Melhinch

Of Elyria, passed away August 17, He was a General Class licensee and member of NOARS. Details @ noars.net. AL was active and participated in NOARS events and nets



Minutes Of The August Meeting!

Photos Courtesy: W8RET Bob

More @ www.noars.net

A Few Of The Callsigns Heard On The

NOARS Nets. Wednesday and Thursdays nights
On The 146.700 & 444.800 Repeaters In Elyria

July 28th ~ August 25th

WD8ADE * WD8ADG * W8ADV * K8AGW * N8AHS * KD8BBI
WA8ERA * W8FJR * KC8FQV * W8GWD * KA8GZA * K8HRD
K8IC * WD8IQJ * KD8JAN * KD8JNK * K8JTK * WB3JVK
KD8KAA * W8KRF * W8KYS * W8KYZ * WA8LGM * K8LP
KD8MUW * KD8NGE * K8PJS * KF8PM * KC8QML * N8QMK
KC8QMK * W8RET * K8RWC * K8TV * WB8UPA * KC8VFE
KA8VTS * KA4VUN * KA8WQL * K8WRS * N8WS * NC8X
WA8YVF
(42)

NOARS Has Three Nets For You!

On: 146.700 & 444.800 MHz Repeaters, and
28.370MHZ

The 8:00 PM Tuesday Night 10 M Net

Join Tim, NC8X for this ever growing net.

The 9:00 PM Wednesday Night Rag Chew Net

One of the longest running two meter nets in northern Ohio! You
all are welcome to this informal friendly net.

Hosted by: WD8ADE – K8HRD – KD8MUW – KD8JAN

The 8:00 PM Thursday Technical Discussion Net.

You don't have to be a techno-geek to enjoy this friendly net
slanted toward the technical side of the hobby.

Hosted by: W8KYZ - WB3JVK – WD8IQJ – W8ADV

Where's the DX? Taken From *KB8NW* Tedd's OPDX Bulletin.

NOTE! This is but a very small part of the complete OPDX Bulletin that can be found at www.papays.com/

- **5C, MOROCCO (IOTA, LH and WFF Op!)** - Operators Ruggero/IK2PZC (5C2P), Leo/I8LWL (5C2L), Fred/IK7JWX (5C2J), Simon/IZ7ATN (5C2SG), Ampelio/IS0AGY (5C2B), Mounaim/CN8QY (CN8QY/p) and Belkaid/CN8QX (CN8QX/p) will be active from the city of Dakhla and the lighthouse (ARLHS WSA-001), which is part of the National Park off the coast of Dakhla (WFF CNFF-007), Morocco, between September 22-29th. Their main purpose of this DXpedition is to activate Herne Island (AF-068) in South Western Sahara IOTA Group (CN), using the callsign 5C2/homecall/p. Activity will be on all HF bands, including 30/17/12m, and 6 meters, using all modes. The team might try an entry in the CQWW DX RTTY Contest (September 24-25th) using the callsign 5C2P. QSL via their home callsigns, direct or by the Bureau. QSL 5C2SG via IZ7ATN, direct (see (QRZ.com)). QSL CN8QY/p via I8LWL, direct only. The team is looking for sponsors and contributors to help fund the operation.
- **9H, MALTA** - Gab, HA3JB, will be on a holiday IPA DXpedition from here and will be active as 9H3IP between September 16-27th. Activity will be on 80-10 meters using CW, SSB, RTTY, PSK31 and SSTV. Operations will also include the CQWW RTTY Contest (September 24-25th) as a Single-Op/ Single-Band (??) entry. QSOs are valid for the HA-IPARC Award. QSL via HA3JB, direct (w/SAE) to: Gabor Kutasi / H-8601 Siófok, P.O.Box 243, Hungary. If you are IPA member please write/add your E-mail address
- **CN, MOROCCO** - Marko, S55EI, will be active as CN2EI between September 3-20th. Activity will be on mostly on 40/6/2 meters using SSB and PSK31. QSL via his home callsign.
- **ER, MOLDOVA** - Victor, ER3MM, from Beltsy, states that he is pretty much on the air daily from 1800-2100z, and usually on 15, 17 or 20 meters. QSL via his address on (QRZ.com).
- **IM0/ISO, SARDINIA** - Max, IZ4JMA, will operate from two different Sardinian islands between September 3-17th. His tentative schedule is as follows: September 3-10th - From Isuledda Island (EU-024); callsign IS0/IZ4JMA September 10-17th - From La Maddalena Island (EU-041); callsign IM0/IZ4JMA Activity will be on 80-10 meters using CW, SSB and the Digital modes. QSL via his home callsign, direct or by the Bureau.
- **IOTA NEWS - EU-011**. Members of the Wessex Contest Group will be active from the Isle of St. Martin's, Isles of Scilly, using the club callsign MX0WCB between September 11-17th. Operators mentioned are Dave/M0SFT, Simon/M0TTE and Dan/M0TGN. Activity will be mainly QRP, on 40/20/17/15/10 meters. The team will use 3 x FT817, a Clansman PR320 and an FT897 as the main shack radio. QSL direct, by the Bureau, eQSL or via M0WAY. Visit the club's Web site at: <http://mx0wcb.blogspot.com> **NA-029**. George, K3GV, will be active as K3GV/VY2 from Prince Edward Island between September 1-30th. Activity will be mainly on 20 and 15 meters. QSL via his home callsign.
- **KH0, MARIANA ISLANDS** - Al, W6HGF, will be active as W6HGF/KH0 from Saipan (OC-086, USI NI002S, WLOTA 1333), Northern Mariana Islands, between September 20-30th. He will be staying at the Saipan Rental Shack, and plans to focus his operation on RTTY. The CQWW RTTY Contest is held during that next weekend, and if all is going well, he will participate. He will use the other modes when time permits. QSL via LoTW is preferred, and will be uploaded daily during operations. QSL direct is also "OK". For more details, check his Web page at: http://www.qsl.net/w6hgf/SAIPAN-W6HGF_KH0.html **ADDED NOTE:** Al is also in the planning stage to make a trip to Ascension Island during November 2011. More details will be available after his Saipan operation. He is also thinking of going back to Miquelon Island (FP) next March 2012 (he was there earlier in March of this year), but that is just in the thinking stage.
- **OH0, ALAND ISLANDS** - Nao, JA1HGY, will be active as OH0HG from Aland Islands (EU-002) between September 2-4th. Activity will be on CW, SSB and RTTY, and include an entry in the All Asian DX Contest SSB Contest. **ADDED NOTE:** Nao is expected to also sign as OH0HG/OH2 before and after his trip to the Aland Islands, where he will visit the mainland Finland, and meet Martti, OH2BH, to celebrate their long term friendship (since 1961). QSL via JA1HGY. Online log will be available on (QRZ.com).
- **P4, ARUBA** - Operators Bob/W3BTX (P49T) and Roy/W3TEF will once again be active from Aruba (SA-036) between August 31st and September 7th. Activity will be holiday style on 160-10 meters using CW and SSB. QSL P49T via W3BTX.
- **PA11, NETHERLANDS (Special Event)** - Fred, PA0FAW, will activate special event station PA11WSF between September 1-25th. Activity will take place during the "World States Festival" which is held in Arnhem. Operations will be mainly on CW and PSK31, with some activity of which will be from WFF-FF-005. QSL via PA0FAW, direct, by the Bureau, eQSL, no LoTW, and SWL-reports very welcome.
- **T8, PALAU** - Tatsuo, JA8CMC, will be active as T88TO from Palau (OC-009) between September 16-19th. Activity will be on 80-10 meters using CW and SSB. QSL via his home callsign.
- **TK, CORSICA** - Operators Patrice/F5RBB and his XYL Mireille/F4FRL will be active as TK/homecall from Corsica between September 10-24th. Activity will be on 40-10 meters using SSB and the Digital modes. QSL via their home callsign, direct or by the REF Bureau.
- **ZK2, NIUE** - Steven, ZL4CZ, will be active as ZK2AB from Namukulu Village between September 9-16th. Activity will be limited because he is on holiday, but hope to fit in as much radio as possible. He will use a Yeasu FT840 (with a FT857 for backup) and a 32 ft. multi-band vertical and Buddipole for antennas. QSL via ZL4CZ; must include SAE and IRC or 2 USDs.

Please Note: This is only a **SMALL** part of: OPDX Bulletin #1024 LOG onto: www.papays.com for the rest (Space permitting, only the parts relative to the time of distribution of The N.O.A.R.S. Log Were Included Here)

Septembers CONTEST CORNER			MODE		
DATE - TIME	BANDS	NAME	PH	CW	DG
9/ 3 - 0000Z	80 ~ 10	All-Asian DX Contest	X		
9/ 3 - 1100Z	10	DARC 10-Meter Digital			X
9/ 3 - 1800Z	160 ~ 6	QCWA Fall QSO Party	X	X	X
9/ 10 - 0000Z	80 ~ 10	Worked All Europe DX Contest	X		
9/ 10 - 1600Z	80 ~ 2	Ohio State Parks On the Air	X	X	X
9/ 10 - 1800Z	6	ARRL VHF QSO Party	X	X	X
9/ 18 - 1300Z	160 ~ 10	Classic Exchange	X		
9/ 18 - 1700Z	80 ~ 10	BARTG Sprint 75			X
Sep 22, 0030Z	80 ~ 10	NAQCC Monthly QRP Sprint		X	

Check for updates, additional contests, and a downloadable PDF version online at www.arrl.org/contests

Got 6?

DATE1:SEP10 1600Z

OSPOTA

MODES:50.145USB

DATE1:SEP10 1800Z-SEP12 0259Z

ARRL SEP VHF

MODES:USB+FM - EXCHANGE : CALL+GRID4

DATE1:SEP17 0000Z-2359Z

CT OP

MODES:50.140USB

DATE1:SEP17 1300Z-SEP18 2100Z

***SC QP**

MODES:50.125USB+FM

DATE:SEP18 1300Z-SEP19 0700Z 2011

***N80FS/P[CABOOSE+SMIRK#6737]**

FREQ:52.525FM+52.500AM+52.500USB

WANT MORE Got 6?

Go to: <http://www.noars.net/got6/GOT6.txt>

For Sale & Advertisement's Page

All Submissions must be sent to noarslog@noars.net or to: NOARS Log, 161 Herrmann Drive, Avon Lake, OH. 44012
 Deadline for submissions is the Third Tuesday of each month. All must include Asking price, sellers name, call sign and phone number.
 Ad's from current NOARS members (or paying advertisers) only will be accepted! Notice! All ad's will be removed after three months (as space is needed) unless updated! NOARS reserves the right to refuse ads at our discretion.

The following items are from the estate of W8AJZ, SK, Ernie Scherban)

MAKE OFFERS TO TOM, W8KYZ ph (440) 930-9115

ANTENNA:

- Buddipole Deluxe \$ 325
- 1 Roll Of Coax-Seal (Make Offer)
- K4AVU Coax Crimping tool (Make Offer)

RECEIVERS:

- Hallicrafters SX-42 (make offer)
- Hallicrafters R-42 matching spkr. " "
- Hallicrafters S-120 " "
- Vertronics SW rcvr., VEC-102K \$ 55

POWER SUPPLYS:

- 25A. JTPS28M, Jetstream Switching, \$ 80
- 45A. MFJ, 4245MN, Switching, \$145

MORSE CODE KEYS:

- J.H.Bushnell Navy Key \$15
- Nye Viking Speed X \$15
- Lionel J-38 \$25
- British Military Key \$35

TRANSCEIVERS:

- YAESU FT-450 (AT) HF/6 \$625
- YAESU 2/440 METER, 7800R \$235

MISC:

- Digital Multimeter \$10
- Earphones, YH-77 \$35
- MFJ-108B 12/24 CLOCK \$15
- Ameco Ocm-2 Code Practice Oscillator \$10
- MFJ-464 Morse Code Reader \$150

5/11

If you have a need for the below listed item, contact Tom, W8KYZ (440-930-9115)

- ANTENNA ROTOR MOUNTING PLATES FOR TOWER
 Graciously, donated to NOARS by Dallas, KC8E

3/11

N8KJG Ken (440) 452-9765 or N8KJG@ARRL.net

- Hammarlund HQ-170 Receiver. Re-tubed and works, but needs tweaking. \$150.00
- Hammarlund HQ-150. Works. \$150.00. Some new tubes. Could be tuned.
- Chameleon V2 HF Mobile antenna with UNUN. New. \$110.00

W8KYZ, 440.930.9115.

- Icom 275H, 100 watt 2 meter all mode. \$375.00
- Nye Viking 3000 watt Tuner. MB-V-A. \$370.00
- Daiwa 24Amp., PS-30XMII, power supply, dual meter. \$75.00.

Contact: Tom

Happenings III

09/25/2011

Cleveland Hamfest and Computer Show

{27.5 Mi*}

Location: Cuyahoga County Fairgrounds

164 Eastland Road, Berea, OH 44017

Website: <http://www.hac.org>

Sponsor: Hamfest Association of Cleveland

Talk-In: 146.73 (PL 110.9)

Public Contact: Glenn Williams, AF8C

513 Kenilworth Road Bay Village, OH 44140

Phone: 440-835-4897

Email: af8c@alumni.caltech.edu

* All Mileage estimates are based from Elyria, OH

Happenings

09/11/2011

Great Lakes Division Convention (Findlay Hamfest)

{95.5 Mi*}

Location: Hancock County Fairgrounds

1017 East Sandusky Street, Findlay, OH 45839

Website: <http://www.w8ft.org> - Sponsor: Findlay Radio Club

Talk-In: 147.15/.75

Public Contact: Bill Kelsey, N8ET

3521 Spring Lake Drive, Findlay, OH 45840

Phone: 419-423-5643

Email: n8et@woh.rr.com

09/18/2011

GCARA Hamfest

{230 Mi*}

Location: Diamond Oaks Career Development Center

6375 Harrison Avenue. Cincinnati, OH 45201

Website: <http://www.gcara.org>

Sponsor: Greater Cincinnati Amateur Radio Association

Talk-In: 146.88 (-600) Alt. 145.37 (-600)

Public Contact: Stan Cohen, W8QDQ

2301 Royal Oak Court, Cincinnati, OH 45237

Phone: 513-531-1011

Email: stanco49@zoomtown.com

NODIG announces an Ohio Area Wide D-STAR Net

Sunday Nights at 8:00 PM on REF038A
or any system linked to it.

Local RF on WA8DIG B or WB8THD B
DV Dongles, DVAPs, Hotspots link to REF038A

NODIG announces Callsign and frequency change for the NODIG Elyria D-STAR repeater:

WA8DIG B

443.4375 MHz +5

Go to <http://www.nodig.us> for details

Mission Statement:

The Northern Ohio Amateur Radio Society

is a public service organization with the purpose and goal to enhance the Amateur Radio
Service through education and fellowship.

- Meetings are held at 7:30 p.m. sharp on the third Monday of every month at the Elyria Police Department Community Room, 18 West Ave in Elyria, OH.
- The meetings are open to the public. And all are welcome. Tune to the 9 pm Wednesday night NOARS net on the 146.700/444.800 MHz. repeaters located on the E.S.T. bank Building in Elyria, Ohio for changes or updates in this schedule. Also the 146.700/444.8 repeater hosts the technical discussion net on Thursday Night at 8:00 pm.
- 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 28.360 MHz, Wednesday night at 9 pm. for the rag-chew net and every Thursday night at 8 pm. for the technical discussion net on 146.700/444.800. 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](http://www(dot)noars(dot)net)
- NOARS Hosts two hamfest/computer shows annually. The winter hamfest in early February and the summer classic NOARSFEST hamfest and computer show in mid July.

If this is your first copy of the NOARS log. Why not become a member and receive it on a monthly basis? Membership is open to anyone interested in communications. The dues schedule is: Full \$10, Associate \$5 (non - licensed), Family members of a full member are only \$2 ea. Make checks payable to NOARS and mail them to:

NOARS Membership Committee, 161 Herrmann Drive, Avon Lake, OH 44012

(Cut on dotted line)

N.O.A.R.S.
161 Herrmann Drive
Avon Lake, OH. 44012



THE NORTHERN OHIO
AMATEUR RADIO SOCIETY

47

Years Serving
The Amateur Radio
Community

U.S.
Postage

Dated Material

Mailing Label