

ALL EARS

www.earsclub.org

The official bulletin of the Escondido Amateur Radio Society – N6WB September 2012

September's meeting details

Due to unforeseen circumstances, our presenters for September's general meeting have had to back out.

We will be providing alternative 'entertainment' for the evening.

We hope to see you all there!

EARS Event Calendar - 2012

- Sep 13 Regular Meeting, 7:30 p.m.
- Sep 15 Monthly Breakfast, 8:30 a.m.
- Sep 20 Board Meeting, 7:00 p.m.
- Sep 29 [VE Testing](#)
- Oct 11 Regular Meeting, 7:30 p.m.
- Oct 18 Board Meeting, 7:00 p.m.
- Oct 20 Monthly Breakfast, 8:30 a.m.
- Oct 27 [VE Testing](#)
- Nov 08 Regular Meeting, 7:30 p.m.
- Nov 15 Board Meeting, 7:00 p.m.
- Nov 17 Monthly Breakfast, 8:30 a.m.
- Nov 24 [VE Testing](#)

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Welcome to September's ALL EARS

By Steve Venner, W6TAN



Hi everyone,

This month, I got a few more articles – so many thanks to Teri, W6TRB, Fred, W6PBR, John, W9EN and Robert, KI6SBL for making the effort.

Disappointingly, I didn't get any photos or articles from either the EARS picnic, or from the Grape-day parade...

Oh well... Maybe next month!

On this point, I'd like to mention something that I talked about some time ago.

Quite often – getting articles for ALL EARS is like pulling teeth. It's very frustrating, and sometimes I feel like I'm the only person writing anything. I often wonder why I bother.

You – as readers probably wonder why the [few] articles seem to be written by the same few people each month. Well – that's because they are.

We need some new blood so to speak.

So to rectify the situation, I'm throwing you a challenge.

If you have an interesting story or article you would like to share with other readers, then do please send it to me for inclusion in the newsletter. As long as you get it to me by the 1st Thursday of the month, then I'll make sure it get's included.

Also – if you have any photos of any amateur radio related subjects or activities – they are always welcome.

73,
Steve, W6TAN.

Robert's Ramblings

By Robert Kitson, KI6SBL



Well, it has been a while since I last wrote a President's article for All EARS. It is amazing how certain deadlines can be missed during the struggles of a busy life trying to maintain a lifestyle.

This month is different...

I promised myself I would write an article so I am not getting up from this table until it is written.

Before I go too far into my article, I want thank all of those who volunteer and participate in all the activities and programs EARS hold through-out the year. We, as a whole, should be proud of our Field Day Weekend, Annual Picnic, Grape Day Parade, and monthly meetings. One person alone does not make these events successful; it takes each and every one of you.

And I thank you!

Each year in September the board appoints a Nominating Committee to solicit and select a slate of officers and board members for the following year.

This year is no different...

Please let me know if you're interested in being on the committee.

In all seriousness, if the last thing you want to do is be on the EARS board next year, then the best thing you can do is join the Nominating Committee so that it does not happen!

As I write this article it is undetermined what will be this month's regular meeting presentation. Our scheduled presentation had to back out. If you want to see how creative John Belstner and your board can be by coming up with a last minute presentation, be at the meeting Thursday. I promise you entertainment, maybe unrehearsed entertainment, but you will be entertained none-the-less.

Lastly, my career is not as stable as I would like it.

In this economy no one is certain, but when one works for a medium that is dying a slow and steady death, one realizes he has to work harder to make himself useful.

This means I will be busy not only for the next 4 months but though 2013 as well.

Thus, I will not be seeking re-election for EARS President.

I am making that clear now because I know what an undertaking being EARS President has become and I know there are only a few in EARS who can handle the schedule.

I am reaching out to you to step up to the proverbial plate and take a swing at running the best amateur radio club in San Diego County.

Until next time,
Rob...

Voice of the VeeP

By John Belstner, W9EN



Unfortunately, I have not received confirmation from our presenters for September.

As a result we will have to go to Plan B, the details of which are still in the works.

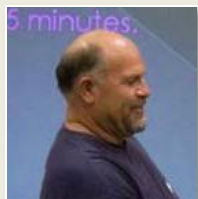
Whatever it is it's sure to be fun. Hope to see you there on September 13.

I've received several e-mails from folks over the last year with excellent suggestions for technical programs.

I would encourage everyone to submit a suggestion or two. That way we can invite a subject matter expert to speak at our meeting on those topics most requested.

Palomar Auction

By Dennis Baca, KD6TUJ



The next meeting of the Palomar Amateur Radio Club will be the PARC Annual Auction.

It will take place on Wednesday, October 3rd, 2012

Location: The Carlsbad Safety Center,
2560 Orion,
Carlsbad,
CA 90210

Art KC6UQH will be the auctioneer

Adjusted times are:

Room setup	5:30 p.m.
Sellers	6:00 p.m.
Byers	6:30 p.m.
Start	7:00 p.m.



Everyone is invited.
Dennis.

Emergency Services Update

By Fred McDavitt, W6PBR



Wildfire season is upon us once again and the "Big One" draws ever closer with the not so subtle reminder of the cluster quakes out near Brawley two weeks ago.

It's time to check out your "Go Bag" and "Shelter in Place" supplies again and renew, replace and possibly expand your survival capabilities in the process.

I did a comprehensive inventory of my "Go Bag", both radio and survival gear, and found out that:

- (1) I had a lot of expired food, water and medicine,
- (2) My first aid kit could now fill a suitcase, actually it is a suitcase and;
- (3) My extra batteries now include a 48 pound 12V (AGM) car battery.

I have run amuck in the "Go Bag" department and it is time to cut back to the essentials, whatever they may be.

I decided that I could never make a bag of essential survival equipment - there are just too many scenarios, both real and imagined, to be prepared for, and how could you ever get all that equipment into one day pack sized container? I couldn't, so I turned to one of the largest manufacturers of pre-packaged survival "Go Bags". For a mere \$149, my problems could be solved and I, and my closest friend, would be able to survive for 72 hours.

Because there is a FEMA figure that I read somewhere that said that there was a 39% chance that I would not be at home when the next disaster might occur, this new "Go Bag" would always be in my Jeep, right next to the extra 12V Optima battery.

The contents of the commercial "Go Bag" had some surprises. Remember, the kit is made up with provisions for two people. The survival food bars, each person gets two a day and the water packets, each person gets 17 fl ozs. a day (a pint) are from lifeboat provisions. The first aid kit is of the generic band-aid, aspirin and alcohol wipes category.

To help you light your night there are two glow sticks, two candles w/matches and a shaker flash light.

There are two emergency ponchos (large garbage bags) and two emergency blankets. For shelter there is a tube tent.

To be prepared for all situations there are two pairs of small work gloves, two pairs of goggles and six dust masks. There is also a whistle and P-38 can opener. The kit inventory includes 100' of rope, which is in reality 100' of Dacron/polyester string.

The kit includes a very good water filtration bottle, in addition to the life boat water packets, the problem with it is that the bottle only holds one pint at a time. But it's better than a sharp stick in the eye if you need more water.

The biggest disappointment was the combination flash light and AM/FM radio which are solar and dynamo (hand crank) powered.

It takes ten hours to charge the solar battery, and then you are supposed to crank it for three minutes before you turn it on.

With all that done, the radio is supposed to run for six hours. Not even close, it ran for just under 30 minutes and would only pick up AM 600 - KOGO, which is perfect because that's the disaster reporting station.

If you end up buying a commercial "Go Bag," for whatever reason, here are a few recommendations:

- (1) Immediately trash the solar radio/flashlight and replace with a more reliable unit. I have a Grundig that works like a champ.
- (2) Add some type of a utility knife. I use a mid-level Swiss Army knife. Leatherman also makes a couple of good utility tools.
- (3) Add 100' of light weight rope.
- (4) Rework the First Aid kit to meet your needs. Don't forget to add your personal medicines.
- (5) Add a roll of toilet paper, six small garbage bags and a small box of handi-wipes.

You can see why I need a small trailer to haul around my "Go Bag"!

The thing to remember, and I never seem to be able to, is that the "Go Bag" is to be used when you are not at home when the disaster hits. It is supposed to have enough gear and provisions to enable you to survive and get home in three days.

Regards,
Fred - W6PBR

Current EARS Membership

By Steve Venner, W6TAN



There were no new members joining EARS this past month:

Therefore, the current EARS membership as of 11th September, 2012 is:

- Life: 51
- Paid: 75
- Total: 126

Christmas is a-coming

By John Belstner, W9EN



Would you believe I saw Christmas stuff in the mall the other day?

It's not even Halloween!

Well, this made me think about the annual EARS Christmas party and how the last few years it's been one of the few opportunities for me to catch up with many of the members in the club.

Continuing in the tradition, this year's EARS Christmas party will be held December 16 at the QTH of John-W9EN.

A special door prize will be awarded to the 1st brave soul to jump in the swimming pool.

Mark your calendars now so you don't forget!

Tales from the Treasurer

By Teri Bloom, W6TRB



Summer has been very busy for me...

I have been volunteering at the ham radio license testing site in Carlsbad, and also at the San Diego Museum of Natural

History.

The testing has been going very well; the last session had 100% passing with 9 new Technicians and 3 new Generals.

It was very exciting!

The new Techs said their secret was that they were all friends and tested each other until the morning of the exam. That was a fun exam session and I am looking forward to the next.

Now are the final days of the exhibit for the Titanic's artefacts at the San Diego Museum, soon they will be shipped off to their new owners to be stored until the next exhibit. The Museum will have their exhibit open until September 9th.

Several volunteers from the USS Midway built the emergency radio replica on display also until the 9th. It is a fine example of top-of-the-line spark-gap technology, recreated from turn of the century parts, so it's as real as it gets. Both the transmitter and receiver work, and the technology is from before tubes or dials!

The main topic discussed there, after the radio, it the heroism of the radio operators, both on the *Titanic* and the *Carpathia* (the ship that took the survivors on board).

The entire lot of items from the Titanic was sold in an auction, everything - including items like the chandelier from the Grand Staircase, recovered jewels, plates from the dining room, and more. The auction had many caveats: the existing contracts for exhibits must be honored, individual items cannot ever be sold separately, and items must be on exhibit in a public place regularly. They cannot be in a private collection. The emergency radio is a replica and will be going back to the USS Midway to go back on display there.

The many activities on board the USS Midway have been in full swing this summer also, along with many radio-room problems...

Some of the cables connecting to both the antennas and internet were disconnected and wired for another use (parts are sometimes hard to come by and they get unknowingly liberated). The morning was spent correcting this and everything was back in operating mode quickly.

Then the heat set in, we had to find several unused fans to help dissipate that problem and also increase the ventilation. It can get stifling in that area of the ship! But it was tolerable by early afternoon and the many radio contacts continued.

The camaraderie of the volunteers on the Midway is worth any setback, and it is wonderful to be a part of the crew.

There is a group of volunteers that refurbish the rooms of the Midway and another that refurbish the airplanes that have flown on her decks. The ship is changing all the time and new areas and items are brought on exhibit; every time I am there - there are new exciting things to see.

There are many uses for the ham radio license and I encourage everyone to see where they can go with theirs.

73 de W6TRB

EARS Elmer List

By Steve Venner, W6TAN



Here is the current list of those kind soles who have volunteered their Elmer services:

1. Harry Hodges, W6YOO

- *Award programs such as WAC, WAS, DXCC, VUCC, IOTA, etc. to include card checking.*

2. Dick Kalkofen, K6KAL

- *Software development and hardware interfacing.*
- *Radio to PC communications.*
- *Logging Software: WinTest, Writelog, DX4Win, N1MM, Ham Radio Deluxe and many others.*
- *Digital mode software, link FLdigi, MMTTY for PSK, RTTY, WISPR, JT65 etc.*
- *Kit building (WinKeyer USB, FA-SM CW/Voice Keyer, Idiom Press Voice Keyer.*
- *Antenna setup and tuning.*

3. Matt Tucker, N6EAJ

- *General electronics (analog), power supplies, audio, batteries.*
- *PSK31 and similar digital modes.*
- *Operating and setting up the computer/radio interfaces.*
- *Basic antennas (VHF for home or car), HF dipoles and multi-band doublets / antenna tuners.*

4. Mike Hightower, KF6SJ

- *HF and in particular, digital modes of PSK31 and JT65.*

5. John Musselman, N6EP

- *HF, electronics, contesting, "other"...*

Another ARISS Event

By John Belstner, W9EN



Astronauts onboard the international space station will once again speak with San Diego County students via Amateur Radio.

At 11:00 a.m. on September 19th, anywhere from 10 to 20 students from Sunset Hills Elementary School in Poway will get the opportunity to speak directly to one of the astronauts and ask a question of their choice.



[Photo courtesy of Steve Venner, W6TAN – taken at previous ARISS event at Adobe Bluffs School]

Not only is this an excellent opportunity to expose youngsters to Amateur Radio, it also whets their appetite to the possibility of a career in science technology engineering and mathematics (STEM).

The event was arranged by:

Jim-KI6ZUM,

with support from NASA mentor:

Kery-N6IZW,

and support crew:

John – W9EN,
Dave – WD6DRI,
Gene – WB9COY,
KC – KC6B and
Phil – KA9Q.

I'm not sure who gets a bigger kick out of these events, the students or the support crew. In any case, I'm certainly honored to be part of the crew.

The equipment will be an ICOM IC-910H controlled by computer to manage Doppler shift.



[Photo courtesy of Steve Venner, W6TAN – taken at previous ARISS event at Adobe Bluffs School]

The antenna array is a pair of long-boom yagis mounted 8 feet apart, fed 90° out of phase and configured for elliptical polarization.



The array is attached to a Yaesu G-5500 AZ/EL rotor mounted to a portable tripod on the roof of the school. The rotor will also be controlled by computer for optimum tracking of the international space station.

[Photo courtesy of Steve Venner, W6TAN – taken at previous ARISS event at Adobe Bluffs School]

Its pass overhead will last no more than 10 minutes.

Our uplink frequency will be assigned to us by NASA just prior to the event, but the space station downlink frequency will be the standard ARISS voice frequency of 145.800 MHz

Technical Challenge

By Steve Venner, W6TAN



This month's technical challenge is to do with Signal-to-noise ratios

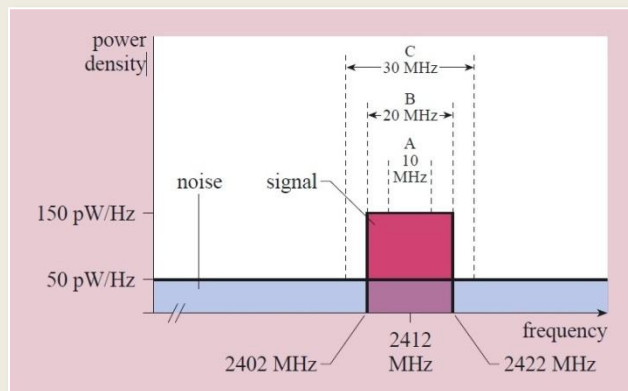
This is one parameter which is sometimes given when specifying the sensitivity of

receivers.

The signal-to-noise ratio is defined as the power ratio between a signal (the meaningful information) and the background noise (the unwanted signal)

The signal-to-noise ratio is found by dividing the signal power by the noise power. The larger the number the better, because that indicates that the signal power is greater relative to the noise power.

The following figure shows the transmitted signal power spectrum in a particular region of space. It also shows the noise power spectrum.



The problem:

There are three receivers, A, B and C, each of which has a different passband width.

Your task is to find the signal-to-noise ratio at each of these receivers.

To help you on your way, I'll give you an example:

Receiver A operates with a passband of 10 MHz centered on the channel frequency, so the signal power is:

$$150 \text{ pW/Hz} \times 10 \text{ MHz} = 150 \times 10^{-5} \text{ W} = 1.5 \text{ mW}$$

The noise power is:

$$50 \text{ pW/Hz} \times 10 \text{ MHz} = 50 \times 10^{-5} \text{ W} = 0.5 \text{ mW}$$

Hence the signal-to-noise ratio is:

$$1.5 \text{ mW} \div 0.5 \text{ mW} = 3.$$

Now it's your turn...

Calculate the signal-to-noise ratios for the other receivers B and C, and hence state which of A, B and C has the best signal-to-noise ratio.

Also, state the signal-to-noise ratios in dB for all three receivers.

That's it for this month – the answers will be given next month as normal.

73,
Steve, W6TAN

General Information

EARS Club Officers for 2012:



President
Robert Kitson, KI6SBL
(760) 715-2876
ki6sbl@earsclub.org



Vice President
John Belstner, W9EN
w9en@arrl.net



Secretary
Vince Sheetz, W6CD
w6cd@earsclub.org



Treasurer
Teri Bloom, W6TRB
w6trb@earsclub.org



Emergency Services Coordinator
Fred McDavitt, W6PBR
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mcdavitt_fred@cox.net

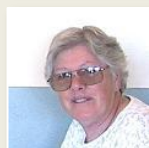
Officers at Large:



Jeff Murdock, AE6GM
(760) 730-3657
cozy765@pacbell.net



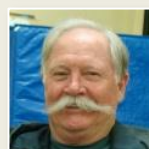
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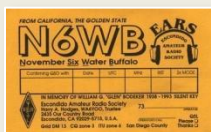


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+ *Property Manager*

About ALL EARS:



ALL EARS is the official bulletin of the Escondido Amateur Radio Society.

An e-mail subscription to **ALL EARS** is FREE!

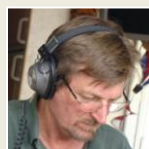
You don't need to be a member. Just drop a note to:

allears@earsclub.org

Permission is given to copy any article contained in ALL EARS when not otherwise copyrighted, and provided proper credit is given.

Note: The deadline to submit material for the bulletin is by the 1st Thursday of the month.

Non-elective:



Past President
John Musselman, N6EP
(760) 747-5303
n6ep@arrl.net



Historian
Harry A. Hodges, W6YOO
(760) 743-4212
w6yoo@cox.net



Webmaster and Newsletter Editor
Steve Venner, W6TAN
+44 1895 636099
w6tan@earsclub.org

General Information cont'd

SUNDAY EVENING NET

EARS Sunday evening net is every Sunday at 8 p.m. local time. You can get the latest information on club activities there.

Just tune in to the club's 2m repeater at 146.88 MHz, negative offset and PL of 107.2, check in and say "Hi!".

SECTION NEWS

The latest happenings around San Diego are available at the official website of the ARRL San Diego Section:

<http://www.arrl.org/Groups/view/san-diego>

EARS PINS

EARS 2010 Board had EARS lapel pins made. They are yellow 1" circles with the EARS Logo in the middle.

They are only \$5.00 each, so get yours today by contacting: Robert Kitson; ki6sbl@earsclub.org

AMATEUR RADIO LICENSE RENEWALS AND CHANGE OF ADDRESS

To renew your license or supply the FCC with a change of address, use NCVEC Form 605 (obtainable from Harry, W6YOO).

Attach a photocopy of your license and mail to:

SANDARC VEC,
5511 Maryland Drive,
La Mesa,
CA 91942-1519.

Note: You **MUST** include your FRN Number.

There is no charge for this service.

HAM RADIO LICENSE PLATES

All California hams may receive their call sign on their license plate.

Use DMV Form REG17A. The cost is \$21.00 and is a one-time fee.

VE TESTING

A SANDARC Volunteer Examiner team administers license examinations on the last Saturday of each month at 9:00 a.m. at:

The LDS Church,
1917 East Washington Avenue,
Escondido,
CA 92025.

Contact Harry, W6YOO, at (760) 743-4212 or w6yoo@amsat.org to schedule an appointment.

SANDARC

"EARS" is a member of the San Diego Amateur Radio Council, an association of San Diego area Amateur Radio clubs.

Among other things, SANDARC runs the local Volunteer Examiner program (SANDARC-VEC), and manages the ARRL southwestern Division Convention when held in San Diego every fourth year. See www.sandarc.net

CLUB REPEATERS

"EARS" operates three repeaters in the Escondido area.

- 146.88 MHz, minus offset, PL 107.2
- 224.14 MHz (AE6GM repeater), minus offset, PL 156.7
- 449.24 MHz, minus offset, PL 127.3

The 2m and 70cm repeaters are local in nature and primarily serve the immediate Escondido area.

ECHOLINK

The 2m repeater is tied to the EchoLink system as node 2846.

See the Club website, www.earsclub.org for information on EchoLink.

There is also a listing of local EchoLink codes in the members section of the website.

General Information cont'd

EARS WEB PAGE

"EARS" is on the Internet!

You can read about upcoming activities, get links to other ham radio sites, read back issues of All Ears, or update your call or address.

The site is updated regularly. Check it out at www.earsclub.org

EARS REFLECTOR

These are free services that keep members up-to-date via e-mail.

To subscribe to either one of the reflectors, go to the EARS website and click on the Yahoo or Google Group links at the bottom of the main page.

CHANGE OF ADDRESS OR CALLSIGN

Please let us know if you change your address, call-sign, telephone, license class, e-mail, etc.

We want to keep our records up to date, so please contact any club officer with the updated information.

CLUB BADGES

Let everyone know that you are a member of EARS, and avoid having them guess what your name is.

Get your Club Badge from:

Glaser Bailey,
2015 S. Escondido Blvd,
Escondido,
CA 92027
(760) 743-5551

MONTHLY BREAKFAST

EARS members meet socially the third Saturday of each month at 08:30, at:

Spires Restaurant,
1215 East Valley Parkway.
CA 92027-2309

ARRL LETTER

The ARRL Letter, a weekly e-mailing of Amateur Radio related news, is available to ARRL members free of charge directly from ARRL HQ.

To subscribe for e-mail delivery, ARRL members first must register on the Members Only Website, www.arrl.org/members.

The ARRL Letter is also available to all, free of charge, at www.arrl.org/arrlletter where it is posted each Friday after it is distributed via e-mail.

EARS HATS, SHIRTS AND JACKETS

Hats, shirts and jackets are available with the EARS logo.

Order them directly from:

Print World,
107 S. Andreasen Dr.,
Escondido,
CA. 92029
(760) 747-6443

Just let them know you are a member of EARS.

Emergency Services

MONTHLY ARES® MEETING

The San Diego section ARES® meets on the second Saturday of each month at 8:00 a.m. at:

Scripps Memorial Hospital,
Nobel Room,
Schaetzel Building,
9890 Genesee Ave,
La Jolla,
CA 92037.

Parking is available in the first lot to the right after the guard shack. The parking fee is \$4.00 and is antenna friendly.

If interested, go to www.sdgares.net or contact Steve Early, Section Manager, (619) 461-2818, or via e-mail at ad6vi@arrl.org.

EMERGENCY SERVICE NETS

Amateur Radio Emergency Service (ARES) San Diego

Sunday, 08:30 146.730 (-) 107.2

Community Emergency Response Team (CERT) Escondido

Tuesday, 19:00 146.880 (-) 107.2

Followed by 146.445 SIMPLEX, as directed

Community Emergency Response Team (CERT) North County and Back Country

Wednesday, 19:00 147.030 (+) 103.5

Followed by 146.445 SIMPLEX, as directed (on 2nd & 4th Wednesdays)

Radio Amateur Civil Emergency Services (RACES) San Diego County

Monday, 7:30 PM 147.195 (+) 114.8

Escondido Amateur Radio Society

Membership Application and Renewal Form

*Call _____

*Last Name _____

*First Name _____

*Street Address _____

*City _____ *State _____ *Zip _____

Home Phone _____

Cell Phone _____

*Email _____

License Expires _____

EARS Family Members _____

License Class _____

First Licensed _____

Old Calls _____

Date of Birth _____

ARRL Member (Y/N) _____ Life Member (Y/N) _____

Amateur Related Interests _____

ARRL, RACES, ARES, SATERN, Red Flag, HF, VHF, UHF, Packet, EchoLink, D-Star, T-Hunt, ATV, Field - Day, Contests, Antenna Design, Equipment Building

Are you willing to run for a club office (Y/N)? _____

Note: Fields marked with a (*) are required.

A Telephone number is requested, but may be unlisted in the roster if you prefer.

Membership Rates:

One year \$15.00
 Family membership \$4.00
 Lifetime membership \$150.00
 Lifetime membership (family) \$38.00

Mail this form with payment to:

EARS,
 PO Box 3243,
 Escondido,
 CA 92033,

Or give it to the treasurer or any other club officer at a regular club meeting.

Checks please, it is safer than cash, and you have a record!

Membership is from January 1 to December 31.

After July 1, membership to the end of the year is ½ the annual fee.

Special rates apply for family membership for each additional licensed amateur radio operator in your immediate family and for lifetime membership.

For membership confirmation, include a self addressed stamped envelope with this form.