



March 2016

([www.k7id.org](http://www.k7id.org))

P.O. Box 1765 Hayden, ID 83835-1765

## REGULAR CLUB MEETINGS:

**Monday, Mar. 14, 7:00 p.m.**  
**Search & Rescue Bldg.**  
**10865 N. Ramsey Rd.**  
**Hayden, Idaho**  
**Topic: ???**  
**Presenter: ???**  
**Refreshments: ???**

**VE Testing**  
**Monday, Mar. 14, 5:30 p.m.**  
**10865 N. Ramsey Rd.**  
**Hayden, Idaho**

**Monday, Apr. 11, 7:00 p.m.**  
**10865 N Ramsey Rd**  
**Hayden, Idaho**  
**Topic: ???**  
**Presenter: ???**  
**Refreshments: ???**

**VE Testing**  
**5:30 p.m. to 6:30 p.m.**  
**Monday, Apr. 11**  
**10865 N. Ramsey Rd.**

**Upcoming Events**  
**Mike & Key ARC**  
**Electronics Show &**  
**Fleamarket**  
**March 5, 2016**  
**110 9th Avenue SW**  
**Puyallup, WA 98371**

**Idaho QSO Party**  
**March 12-13**

## Letter From the President

**Dave Boss KF7YWR**

March 2016

[boss@infinityusers.com](mailto:boss@infinityusers.com)

208.290.8590

What a wonderful pre-spring we are having, daffodils showing their bright green stalks thru the bark and duff in the flower beds. Rhubarb crowns plowing up to see the sun and just a hint of snow left in the shade of the barn. Scores of tops down from the flimsy jack and ponderosa pines that cover our place and several large trees down from the snow load that stayed in the trees for what seemed an eternity. Even more chainsaw work to go with all that was leftover from last year. Bah humbug! I would not change a thing though about the weather we have seen so far, you have to love springtime in Idaho!

I hope to put up some antenna supports this year finally, seems as I get older the heat takes more of a toll on me, and the heat last year definitely won the battle. I hope this year is more of a North Idaho summer.

Upcoming Events:  
(Continued next page)

**Idaho QSO Party March 12-13, 2016. The fun starts at 1900 Zulu Saturday and go to 1900 Zulu Sunday.**



**Details @ K7ID.org  
Or talk to Ed Stuckey AI7H**



**Are you ready?**

**Hamfest June 10-11, 2016**

Volunteers needed for the Hamfest! The usual suspects have already signed up and we will need some new faces to round out the crew, heck we'll even take old faces that are willing to help out.

**Call Sign Trustee**

Please welcome Larry Telles, K6SPP, as our new Club Call Sign Trustee and Member to the Board of Directors.

## **K7ID.ORG Outage and Improvements**

Lenny Gemar, N7MOT, our Executive Officer has news about the web site. Quoting Lenny, "apparently an e-mail got lost in transferring the domain registration. Because it expired on the 28th, the site is now inaccessible. I believe I have done everything needed to resolve this, and their response is, it can take from two hours to seven days to fully update everything. Hopefully it's closer to hours rather than days. (It was hours) The good news to all this is that we are now fully in control of our domain, and I renewed it for nine years. Once everything is back up, I'll add in those of you that want domain access so that if I should get hit by a bus you're not out in limbo". Problem has since been resolved and with the extra work he has done, we will not have to worry about this for a while. We lost K7ID.Com as a result of a mix-up with lack of updating contact info and wrong e-mail addresses and it appears some underhandedness with the domain provider.

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Dave Boss KF7YWR

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Kootenai Amateur Radio Society  
February 2016 Meeting Minutes

The meeting was called to order at 7:00pm by Club President Dave Boss (KF7YWR). The Pledge of Allegiance was led by Pat Patterson (W6SGS).

VE testing Results: two made attempts for their technician class license but were unsuccessful, best of luck to them for March. David Lehmann advanced to General Class (KI7AAR/AG).

January Minutes could not be approved due to an internet issue with the newsletter going out, Gary Roth is working to resolve the issue, and the approval of the minutes will have to wait until the March meeting.

Club Treasurer's Report: January's Report- Checking \$3,241.74, Savings \$1,800.74, Petty Cash \$96.78, Total \$5,139.26. Monthly expenses consisted of: Technician Class Training Material \$51.85, Baofeng UV/5R – NWTN Raffle \$25.34, Materials for Special Board Meeting Dinner \$38.80, Total Expenses \$115.99.

Idaho QSO Party – March 12<sup>th</sup> 11am until March 13<sup>th</sup> 12pm. Also remember the Time Change that weekend too! Ed Stuckey (our ARRL Section Manager and Club Member) wants to remind everyone that it is a

PARTY not a contest. That said, if you are interested in finding out the “party” rules go to [www.idahoarrl.info](http://www.idahoarrl.info) and check it out. Be sure to get on the air that weekend and either make some contacts into Idaho or make some contacts out of Idaho.

Larry Telles (K6SPP) conducted the monthly presentation on RS-UV3 which is capable of working on 144, 220 and 440 MHz.

Following Larry’s presentation, Dan Croskey (NV2Z) conducted a show and tell on System Fusion and demonstrated the new Fusion/Analog repeater which is bound for our Idaho Mica site. The new repeater will be setup in AMS mode (Automatic Mode Select) which will allow both fusion digital and analog radio users to use the repeater. Once the repeater is up and operational it will be working on 443.275 MHz (+) Tone has not been set yet. This will be an ongoing project for the coming months so stay tuned for more updates.

The Spokane VHF Club has also installed a System Fusion repeater on Mount Spokane. The repeater is also operating in AMS mode on 444.6MHz (+) TX Tone of 123.0 Hz.

Dale DuRee (KE7VMN) will be conducting a General Class Course at Kootenai Health beginning on March 30<sup>th</sup> 7pm-9pm and running for 8 weeks. The class will be taught in the Tamarack Room inside the Health Resource Center at Kootenai Health. To register for the class, please contact Bob Wheeloc via email at: [Rawheeloc@aol.com](mailto:Rawheeloc@aol.com) and he asks that you put “General Class” in the subject line.

Club Callsign Trustee, Rick Van Landingham (KI7I) has announced his resignation as Club Trustee effective February 29<sup>th</sup>. The Club Trustee position is an appointed position by the Club President which requires the appointee be both a club member in good standing and also hold an Extra Class license. Club President Dave Boss will be working over the coming weeks to contact qualified interested parties to step into the position.

#### Raffle Results:

50/50	\$8.75	KE7ADT	Bearpaw
Member	\$53	W7KLL	Ken

Lindhahl – Ken was not present

Allan Campbell (KE7DFT) made the motion to adjourn the meeting at 8:45pm, 2<sup>nd</sup> Frank TenThy (KG7CUI), motion passed and meeting was adjourned.

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## Arkansas VHFer Claims “Mathematically Impossible” AO-7 Mode B Distance Record

Dave Swanson, KG5CCI, of Arkansas has achieved another distance milestone on the venerable AO-7 satellite using Mode B (70 centimeters up/2 meters down).

On February 10, Swanson, on Shinnal Mountain west of Little Rock (EM34st), completed a scheduled contact with Eduardo Erlemann, PY2RN (GG66lw), a calculated distance of 8030.895 kilometers (approximately 4979.2 miles), which Swanson said was “way beyond the theoretical range AO-7” and a feat that “the math said shouldn’t be possible.”

The tricky part was that, given their respective locations in the Northern and Southern hemispheres, the window allowing both to access the satellite at the same time was on the order of 5 seconds. After several attempts, they agreed to use quick call sign/grid square reports.

“At 2009 UTC, both stations clearly heard the other’s call and grid, completing the contact,” Swanson said. “It was extremely rapid and very weak, but clear... I think this is approaching the limits of what can be done on AO-7.” PY2RN has posted his side of the contact, which Swanson called “by far the hardest sked I’ve ever attempted.” (ARRL News)

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## FCC Seeks Comments on Petition to Grant Lifetime Amateur Radio Licenses

The FCC is seeking comments on a *Petition for Rule Making* (RM11760) that asks the FCC to grant lifetime Amateur Radio licenses. Mark F. Krotz, N7MK, of Mesa, Arizona, filed his request with the FCC last November. He wants the FCC to revise § 97.25 of its rules to indicate that Amateur Radio licenses are granted for the holder’s lifetime, instead of for the current 10 year term. Krotz noted that the General Radiotelephone Operator License (GROL) already is issued on a lifetime basis, and he maintained that not having to renew licenses would lighten the FCC’s workload.

“It would be mutually beneficial for the FCC and Amateur Radio operators to update Part 97 to grant operator licenses for lifetime, Krotz said in his filing. “The FCC would benefit by reducing administrative costs.”

In 2014 the FCC granted lifetime credit for examination elements 3 and 4, but applicants seeking relicensing under that provision still must pass examination element 2.

Individuals may submit comments via the FCC’s Electronic Comment Filing System (ECFS). (ARRL News)

## The Radio Voice of a Century

Fred Crockford, who lives in the Borough of Brentwood, recently told his local newspaper in the UK, "I have been retired longer than some people have been at work."

In fact, Fred, G6YUY, has also likely been on the air longer than many people have been on the planet.

The retired trolley bus driver first went on the amateur bands in the 1920s, when radio operations were governed, he said, by the post office. Now he's not just a licensed ham but a centenarian ham, having just celebrated his 100th birthday.

He said radio has made every one of his many days an adventure. And he told the newspaper the fun is in the surprise discovery of who is available to talk from anywhere in the world. He said: "We talk to whoever happens to be out there on that particular spot and at that particular moment." A 70-foot-long-horizontal aerial carries his voice everywhere - even to Australia.

Fred told the newspaper he still sets aside about two hours every evening to reach out, via radio, to the world. And whether he lands in the United States, New Zealand or Australia, the thrill of DXing is no less a thrill to him at 100 than it was when he was a young man.

It seems that, at 100 years of age, his most treasured birthday gift of all has been the gift of time.

For Amateur Radio Newline, I'm Jeremy Boot, G4NJH, in Nottingham, the UK (THE BRENTWOOD GAZETTE)

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### Armed Forces Day 2016 Communication Test to Include Direct Military-Ham Contact on 60 Meters

This year's Armed Forces Day Crossband Communication Test on Saturday, May 14, will include a significant new wrinkle: Select military stations will be using 60 meter interoperability channels to communicate directly with Amateur Radio stations on the band. Back this year, select military stations will use crossband Automatic Link Establishment (2G ALE) communication as well as MIL-STD Serial PSK to send the Secretary of Defense Armed Forces Day message. Armed Forces Day 2016 is Saturday, May 21, but the radio event is held earlier to avoid conflicting with Dayton Hamvention, May 20-22.

The annual Armed Forces Day Communication Test is an opportunity to exercise two-way communication capability between Amateur Radio and military stations using a variety of modes, including SSB and CW as well as digital modes. The annual event gives participants - including shortwave listeners (SWLs) - an opportunity to demonstrate their technical skills, and to receive recognition from the appropriate military radio station.

QSL cards will be provided to all stations that make contact with the military stations. The Army, Air Force, Navy, Marine Corps, and Coast Guard cosponsor the joint military/Amateur Radio, with military stations transmitting on military frequencies and listening on Amateur Radio bands.

Amateur Radio stations and Short Wave Listeners interested in trying the MIL-STD Serial PSK mode can download ([www.n2ckh.com?MARS-ALE-FORUM/MSDMT.html](http://www.n2ckh.com?MARS-ALE-FORUM/MSDMT.html)) the software program, MS-DMT.

Full details about this year's Armed Forces Day radio activities - including stations, frequencies, times, and modes of operation - will be posted by April 12 as well as on the US Army MARS Facebook page. (ARRL News)

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### First Solid-State Transmitter to Span the Atlantic Now Part of ARRL Historical Collection

A flea-powered transistorized ham transmitter built in the 1950s and used to make a transatlantic contact has become part of the ARRL Historical Collection. The noteworthy historical artifact was donated by Andy Stewart, KB1OIQ, on behalf of the estate of Gus Fallgren, W1OG (SK), the ham at the key for the momentous event. Fallgren - then W1OGU - and two other Raytheon Engineers, Al "Hank" Hankinson, W1OSF, and Dick Wright, W1UBC, built the little transmitter in the summer of 1956 on a lark, to see if they could achieve Work All Continents (WAC) with it. The 20 meter, 78 mW transmitter was designed around a pair of Raytheon 2N113 transistors — one as a 7 MHz oscillator, the other as a frequency-doubling power amplifier. On September 18, 1956, Fallgren, in Chelmsford, Massachusetts, running the transistor transmitter into a 3 element wide-spaced Yagi, worked OZ7BO in Copenhagen, Denmark. His signal report was 339.

The transmitter was the first to run Raytheon transistors on 20 meters. Hams had previously constructed low-power, solid-state transmitters for 40 meters and made contacts spanning up to 800 miles. Fallgren's 3800-mile

contact worked out to approximately 47,500 miles per watt. Raytheon documented the historic contact in the February 1957 edition of *Radio and Television News* - with a feature banner and cover photo of W1OGU in his shack with the battery-powered transistor transmitter - and it was reported in other publications as well, including Raytheon's own publication and the *Boston Globe*. A November 1956 *QST* "Stray" reported that Fallgren had "worked KP4, TI2, OZ7, and G3, and has reportedly been heard in VK" with the little rig and included a photo.

Assistant ARRL Laboratory Manager, Bob Allison, WB1GCM, staff liaison to the ARRL Historical Committee, accepted the donation.

"We are all delighted that this well-documented transmitter was donated to the ARRL Historical Collection," Allison said. "It tells the story of its important role in the development of Amateur Radio technology. The ARRL wishes to thank Andy Stewart, KB1OIQ, for arranging this donation."

The donation to the ARRL's collection of Amateur Radio historical artifacts consists of the original transmitter and a 7.013.4 kc crystal, the Vibroplex bug used for the contact, W1OGU's station log documenting the contact, newspaper clippings reporting the event, and other ephemera associated with the DX feat.

The transmitter will be placed on display in the ARRL Laboratory, along with the bug, station log, and the issue of *Radio and Television News* with Gus Fallgren on the cover. (ARRL News)

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New Amateur Extra Question Pool Puts Greater Emphasis on Digital, SDRs, Propagation

The new Amateur Extra class license examination question pool, effective from July 1, 2016, through June 30, 2020, now is available at the National Conference of Volunteer Coordinators (NCVEC) website. The latest revision contains a few minor corrections that had been released in a February 5 errata of the initial January 8 release. NCVEC Question Pool Committee Chair Rol Anders, K3RA, said the new pool represents a fairly significant change relative to the current question pool, which expires on June 30.

"The primary change is modernization of the pool to place more emphasis on digital communications, digital test equipment, software defined radios, and propagation/space weather," he said. "Also, a number of other topics were added, including questions on some additional antenna types commonly used by radio amateurs." Anders said that room to cover the new topics was made in the

question pool by dropping some questions that had been in the expiring pool.

"Many of the questions removed were on topics which were felt to be of less importance to the current amateur population," he said. "However, there was also some 'evening out' of difficulty in the removal of a number of questions felt to be inappropriately easy or difficult relative to the rest of the pool." As a result, he said, the net number of questions grew from 700 to 712 questions.

All questions in the expiring pool were re-evaluated for possible clarification or improvement, and approximately 60 questions were slightly modified.

"All in all, the Question Pool Committee has worked to keep the Amateur Extra class exam up to date, to provide a high-quality examination, and to ensure that the incoming Extra class amateurs are well-qualified to be leaders in the hobby," Anders said. (ARRL News)

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### Ham Radio Movie Gets TV Pilot

The hottest thing on TV these days might just turn out to be radio - ham radio, to be exact. Just as TV's "Last Man Standing" has given viewers a sampling of what goes on inside a ham shack, the CW Network has announced it plans a pilot for the 2000 movie, "Frequency," from New Line Cinema. In that sci-fi thriller, the son of a deceased New York City firefighter, makes radio contact with his dad over the father's old ham radio equipment after an aurora borealis alters band conditions across time.

The TV pilot recasts things with a new twist. It follows a female detective who uses her ham radio to communicate with her detective father, who'd died 20 years earlier. If all goes well, the producers may end up being more concerned about RSTs than Nielsens. (TVLINE.COM, The CW TELEVISION NETWORK)

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### FCC SEEKS COMMENTS ON LIFETIME LICENSES, 80/75 METER CHANGES

If you have thoughts on the ARRL's petition for the FCC to make changes to 80 and 75 meters, now is the time to share them. Or if you want to weigh in a proposal that the FCC issue lifetime amateur radio licenses, take care of that now too.

On the bands, the ARRL has asked the commission to fix what it calls a shortfall in available spectrum for RTTY and data, following the bands' reapportionment by the FCC a decade ago. The ARRL would like to see the

boundary shifted between the 75 meter phone/image subband and the 80 meter RTTY/data subband - a proposal that the league's Board of Directors adopted as policy in July of last year. The ARRL would like the phone/image subband to extend from 3650 kHz to 4000 kHz and the RTTY/data subband to extend from 3500 kHz to 3650 kHz. The ARRL would also like 3600 kHz to 3650 kHz made available for General and Advanced Class licensees - as it had been before 2006.

The FCC is also considering a request made last year for lifetime licenses to replace the 10-year term. In his petition, Mark F. Krotz, N7MK, of Mesa, Arizona, pointed out that the General Radiotelephone Operator License sets a precedent because it is already valid for a lifetime.

Using the FCC's Electronic Comment Filing System (ECFS), select RM11759 for the 80 and 75 meter issue, and RM11760 for the lifetime license issue. Let your voice be heard. (ARRL News)

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### MAKING WAVES? NO, DISCOVERING THEM

**DON:** A recently announced discovery that illuminates Einstein's Theory of Relativity turned out to be relative, as well, to the work of one radio amateur in the 1970s. Here's Amateur Radio Newline's Paul Braun, WD9GCO, with the details:

**PAUL:** A worldwide team of physicists could not have been happier earlier this month when their discovery made global news: they had captured the sound of the collision of two black holes, a billion light-years away, in space. The finding of the Ligo Project, reported in the New York Times and other media, fulfilled Albert Einstein's prediction, a century earlier, that gravitational waves do indeed exist.

Einstein would not be surprised, of course, and neither would other scientists who had long pursued this theory of his with their own imaginations and antennas. One of those scientists from years ago turns out to be a radio astronomer - and radio amateur - Joseph H. Taylor Jr., K1JT. Taylor was awarded the 1993 Nobel Prize in Physics with colleague, Russell Hulse, for discovering and interpreting the electromagnetic radiation emissions from a pulsar, giving new insights into gravitational waves. Their discovery, made at the University of Massachusetts Amherst in 1978, was one of many leading to this most recent revelation.

The executive director of the Ligo Project, professor David Reitze, told the media this month: "It's the first time

the universe has spoken to us through gravitational waves. Up until now, we've been deaf."

As any ham would add, good copy is everything, even with a black hole: it's all about the power of antennas and reception, after all.

For Amateur Radio Newline, I'm Paul Braun, WD9GCO, in Valparaiso, Indiana. (THE NEW YORK TIMES, BBC.COM)

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### MEMORABLE MICROWAVE MOMENT

Another kind of meaningful radio contact in the UK has been reported: In fact, the two hams, Chris G0FDZ/P and Roger G8CUB/P, likely won't forget Friday, Feb. 19, for a long time to come. They've reported on the UK Microwave Yahoo Group that they completed the first UK amateur radio contact on the 241 GHz band that day at 1500 UTC.

The microwave contact was made in locator square JO01EP. The distance was 30 meters and the CW signals were 559 and 589. The next issue of the UK Microwave Group's newsletter, "Scatterpoint," is expected to carry more details. (SOUTHGATE AMATEUR RADIO NEWS)

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**COFFEE & DONUTS  
EVERY THURSDAY MORNING**

**0:00 A.M.  
To  
10:00 A.M.**



**Community Mtg Rm  
Silver Lake Mall  
Coeur d'Alene**

**TALK-IN: 146.980, PL127.3  
443.975, PL136.5**

Bring a Writing Instrument **Community Mtg Rm**  
has the napkins for our breakfast table engineering!

Deadline for submitting articles, stories, reports, etc., is the 25th of each month for the following month's newsletter.

# Kootenai Amateur Radio Society (KARS) MEMBERSHIP APPLICATION

**One year membership Rates:**

New Member: \$15.00  Renewal: \$15.00  Family Membership: \$23.00

**Two year membership Rates:**

New Member: \$28.00  Renewal: \$28.00  Family Membership: \$42.00

**Lifetime membership:**

Member: \$150.00

**Information Update Only**

**Are You An ARRL Member?                      Yes / No ( Please Circle One)**

Callsign: \_\_\_\_\_ Class: \_\_\_\_\_ Expiration: \_\_\_\_\_

First Name: \_\_\_\_\_ M.I. \_\_\_\_\_ Last Name: \_\_\_\_\_

Nickname: \_\_\_\_\_

Address1: \_\_\_\_\_

Address2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_ - \_\_\_\_\_

PHONE NUMBER: (\_\_\_\_) \_\_\_\_\_

**OK to publish phone number?                      Yes / No ( Please Circle One)**

EMAIL ADDRESS: \_\_\_\_\_

**OK to publish Email address?                      Yes / No ( Please Circle One)**

**Do you want to receive the emailed Newsletter?                      Yes / No ( Please Circle One)**

Note: If this is a family membership, (all members with the same address), please complete the following section for your family.

Name: \_\_\_\_\_ Call: \_\_\_\_\_ Class: \_\_\_\_\_

Name: \_\_\_\_\_ Call: \_\_\_\_\_ Class: \_\_\_\_\_

Name: \_\_\_\_\_ Call: \_\_\_\_\_ Class: \_\_\_\_\_

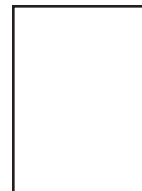
Name: \_\_\_\_\_ Call: \_\_\_\_\_ Class: \_\_\_\_\_

*RETURN THIS FORM WITH YOUR DUES, (CASH OR CHECK), TO THE KARS TREASURER,  
OR, MAIL TO: KARS MEMBERSHIP, P.O. BOX 1765, Hayden, ID. 83835-1765.*

(Office use only.)

Cash:		Check #:		Money Order:	
Membership Card:		Roster:		Newsletter:	

**KOOTENAI AMATEUR RADIO SOCIETY**  
**P.O. Box 1765**  
**Hayden, ID 83835-1765**



## **DIRECTIONS TO KARS MEETING:**

Take U.S. Highway 95 to Miles Avenue (Miles is about 1 mile North of Hayden Avenue). Instead of proceeding west from the corner of Miles and Ramsey, go north about ¼ mile, to the first building on the left (West) side of the road.

## **2016 CLUB OFFICERS**

President: Dave Boss, KF7YWR  
president@k7id.org

Vice-President: Alan Campbell, KE7DFT  
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Past President: Dave Boss, KF7YWR

## **Notice**

Propagation is published monthly by the Kootenai Amateur Radio Society (KARS). The club is located in Coeur d' Alene, Idaho and serves the North Idaho and the Spokane, Washington areas.

All opinions expressed in this newsletter are those of the individual contributors and not the radio club as a whole.

KARS operates a voice repeaters on 146.980 and 443.975, and a packet repeater on 145.510 Mhz.

Anyone interested in Amateur Radio is welcome to join. Dues are \$15.00 (individual) and \$20.00 for a family membership. Contact the Treasurer if you wish to join.

If you know of anyone interested in joining KARS, you can notify the newsletter editor as to that parties' email address. A copy of this newsletter will be sent with no obligation to join.

Material can be submitted for publication in Propagation. The deadline for articles, etc., is the 25th of each month for the following month's issue.