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K7LED RELAY EDITOR

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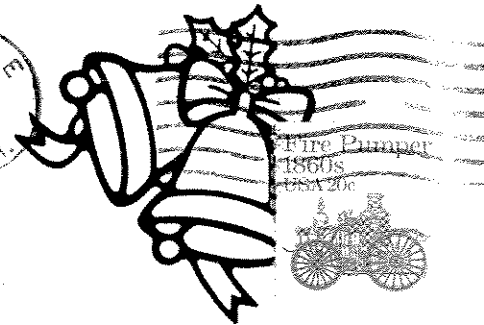
The Mike & Key net meets each Sunday morning at 10 a.m. on 3,930 Khz with Novice and CW check-in on 3,730 Khz and VHF on 146.58 Mhz and K7LED/R 52.37—53.37 Mhz.

Club meets the third Saturday of each month at 10 a.m. at "The Good Neighbor Center" located at 305 S. 43rd St. in Renton, which is across the street from Valley General Hospital.

MIKE AND KEY AMATEUR RADIO CLUB

4522 Brooklyn Ave. N.E., Apt. 316

Seattle, WA 98105



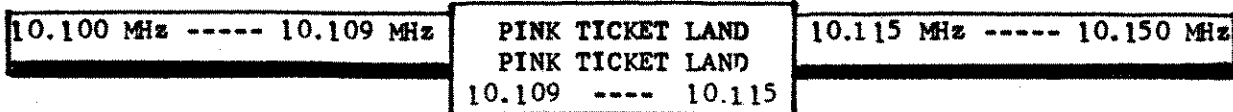
NO SUCH STREET
IN SEATTLE, WASH

KE7I
JOHN BENTLER
17018 124TH AVE SE
SEATTLE, WA

NOT DELIVERABLE
AS ADDRESSED
UNABLE TO FORWARD
RETURN TO WRITER



THE THIRTY METER BAND



QST DE WIAW

HR ARRL BULLETIN

NEWINGTON CT TO ALL RADIO AMATEURS

Thirty meter band users are reminded that only the frequencies 10.100 to 10.109 and 10.115 to 10.150 are available to the Amateur Service in the U.S. Violators believed by FCC to be repeatedly or willfully using the frequencies 10.109 to 10.115 MHz are now being fined by the Commission. During the previous three weeks or so, FCC has warned violators with advisory notices or phone calls. However, the Commission has now received an official complaint of interference from the Government service which uses 10.109 to 10.115 MHz and accordingly has escalated its response. Thirty meter users are further reminded that the entire assignment is temporary and is available on the basis of no interference being caused to stations in the fixed service. Only A1 and F1 emissions are permitted and power is limited to 250 watts input by General, Advanced or Extra Class license holders only. AR

 In early 1980 a group of students at Rensselaer Polytechnic Institute in Troy, New York formed the Independent Space Research Group (ISRG). Their membership now totals some 200 individuals around the globe. So what?

Their first project is to build an Amateur Space Telescope and have it placed in orbit by 1984. With an appropriate converter and standard TV you will be able to tune in as the telescope scans Jupiter, Mercury and Venus. Martian craters 43.5 miles across will be resolved.

A network of Amateur stations will operate the AST along with an ISRG facility. Geosynchronous OSCAR satellites are planned as radio links with the AST.

Should you wish to become a supporting member, inquire to: Independent Space Research Group P.O. Box 1246 Troy, New York 12180 (Tks T-1'R)

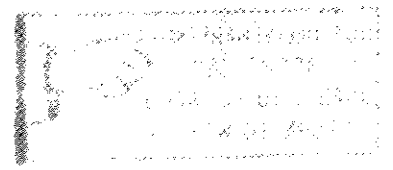
 from THE ARRL-LETTER

When the ARRL Committee of Tellers met Saturday, November 20, attention focused on two races in particular. In the Northwestern Division Director's contest, incumbent Mary Lewis, W7QGP, narrowly defeated Joseph N. Winter, WA7RWK, 1917 to 1909. Indications that it was a heated race too close to predict were borne out by the eight-vote victory margin for Mary, the first woman to be elected to the ARRL Board. Previously Mel C. Ellis, K7AOZ, unopposed, had been declared the winner in the Vice-Director's race. ...

The Washington State CB Radio Association recently requested the FCC to allow the use of an external device (VFO) on CB transmitters to "fine tune a transmitter" that would "significantly improve the quality of CB communications."

73 Mary, W7QGP, Northwestern Division Director ARRL

MERRY CHRISTMAS EVERYONE!!!



American Radio Relay League Report

Chris Imlay N3AKD



Greetings. This column will be a bit different than usual this month for two reasons. First, on September 13, President Reagan signed into law the "Communications Amendments Act of 1982, now known as Public Law 97-259, which you all can guess from reading this column is the so-called "Goldwater Bill, S-929 or HR-5008". This is the most important piece of legislation to amateurs for many years. We have previously discussed what is contained in that legislation, but what is known as the "legislative history". Congress statements regarding this legislation, is often as important in determining the full ramifications of the act than the actual terms of the law. It is helpful to look at the Amateur Radio Service through the eyes of Congress and see how we appear to them.

Second, your correspondent has been so much engaged in the implementation of this legislation that the time for gathering other news has slipped by quickly. Attached are excerpts from the joint House/Senate Conference Report.
ON P.L. 97-259, INTRODUCTION;

The amateur radio service is as old as radio itself. Every single one of the early radio pioneers, experimenters, and inventors was an amateur: commercial, military, and government radio was unknown. The zeal and dedication to the service of mankind of those early pioneers has provided the spiritual foundation for amateur radio over the years. The contributions of amateur radio operators to our present day communication techniques, facilities, and emergency communications have been invaluable.

In the early 1920s, amateurs were relegated to the portion of the radio frequency spectrum that was considered at that time to be virtually useless: the short-waves below 200 meters. These short-waves that once were considered useless are now occupied by marine and aviation, police, and public safety, television and FM broadcast, international broadcast, and amateur services, to name a few.

The Amateur Radio Service has been praised for being self-regulated. The Commission has reported that less time has been devoted to monitoring and regulating the Amateur Service than to any other service because of its self-policing and discipline.

One primary purpose of the Conference Substitute is to provide the Federal Communications Commission with the authority to implement various programs which will result in improvements in administration of the amateur radio service and to cut the cost thereof. It will further allow the amateur radio service to continue its tradition as the most self-regulated radio service in the United States, and to become to some extent self-administered, requiring even less expenditure to government time and effort than in the past.

RFI REJECTION STANDARDS

Particularly since the advent of commercial television immediately following World War II, amateur radio operators have been active in interference control and elimination. The amateurs learned very early that the incorporation of good engineering practices in their transmitter construction, such as electrostatic shielding and filtering, minimized the possibility of interference by preventing the radiation of spurious signals. Such practices and techniques are well understood and are universally incorporated in transmitters manufactured and in use today, irrespective of the service. Appropriate rules of the Federal Communications Commission require all transmitters of all services, including the transmitting sections of transceivers, to suppress spurious radiation.

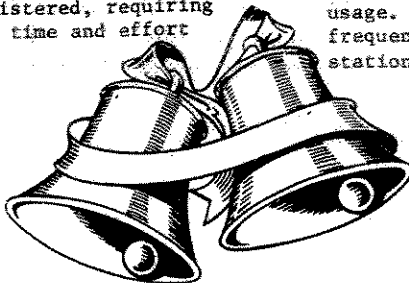
Many manufacturers of home electronic equipment and systems have been willing to provide, often free of charge, filters for electronic equipment when a particular interference problem is brought to their attention. However, their efforts to voluntarily address the root problem by incorporating such RFI suppression techniques in the design and assembly-line stage have been less than adequate. This is true even though such filtering mechanisms and anti-interference design may only cost a few cents per unit.

The Conference Substitute would thus give the FCC the authority to require that home electronic equipment and systems to be so designed and constructed as to meet minimum standards for protection against unwanted radio signals and energy. Extensive amateur and Commission experience over the years with interference investigation and elimination supports the conclusion that, in most instances, satisfactory corrective measures can be simple and inexpensive.

THE CONFERENCE SUBSTITUTE IS FURTHER INTENDED TO CLARIFY THE RESERVATION OF EXCLUSIVE JURISDICTION TO THE FEDERAL COMMUNICATIONS COMMISSION OVER MATTERS INVOLVING RFI. SUCH MATTERS SHALL NOT BE REGULATED BY LOCAL OR STATE LAW, NOR SHALL RADIO TRANSMITTING APPARATUS BE SUBJECT TO LOCAL OR STATE REGULATION AS PART OF ANY EFFORT TO RESOLVE AN RFI COMPLAINT. THE CONFEREES BELIEVE THAT RADIO TRANSMITTER OPERATORS SHOULD NOT BE SUBJECT TO FINES, FORFEITURES OR OTHER LIABILITY IMPOSED BY ANY LOCAL OR STATE AUTHORITY AS A RESULT OF INTERFERENCE APPEARING IN HOME ELECTRONIC EQUIPMENT OR SYSTEMS. RATHER THE CONFEREES INTEND THAT REGULATION OF RFI PHENOMENA SHALL BE IMPOSED ONLY BY THE COMMISSION.

Revision of License Terms;

A ten year license term might be inappropriate, for example, in many of the Private Radio Services, where a current data base is necessary for accurate and current knowledge of spectrum availability and usage. For other services, however, where specific frequency assignments are not made to individual stations, ten year license terms would not impede



American Radio Relay League Report

the Commission's spectrum management capabilities. The Conferees believe that, in authorizing the Commission to license for such terms where appropriate, the burden on the public and on the Commission will be lessened by reducing the number of renewal applications filed.

Use of Amateur Volunteers for Certain Purposes;

The benefits of amateur radio to individuals, especially young people, including technical self-training and knowledge of electronics should not be denied to such persons on the basis of personnel shortages at the Commission.

To help alleviate this problem, for several years amateurs of a higher license class have voluntarily administered novice (entry) class amateur radio license examinations to candidates. After administering the exam, the volunteer mails the written portion of the exam to the Commission for grading. This has saved Commission resources and provided a convenient method of administering these entry level examinations, especially to young people interested in radio.

The Conferees believes that this use of volunteer services by licensed amateurs by the Commission is a beneficial and efficient utilization of manpower in the public interest. Thus, the Conference Substitute provides a statutory basis for present Commission practice and extends the concept to include the volunteer administration of all classes of amateur licenses. To guard against conflicts of interest, persons who own a significant interest in or are employees of any entity involved in the manufacture or distribution of amateur radio equipment, or involved in the preparation or distribution of publication which may be used as study aids for amateur license exams are disqualified from volunteering to administer amateur exams.

This provision also authorizes the Commission to utilize the volunteer assistance of amateur licensees in the preparation of amateur license exams, notwithstanding any contrary provision of law. See generally, 31 U.S.C. 665(d) (1976). The FCC's failure to update and revise written examinations has resulted, through repetition, in compromise of the examination system. The Conferees expect that volunteering individuals and organizations will protect against the premature disclosure to the public of submitted questions. Another important consequence of the diminishing resources of the Commission's Field Operations Bureau, is the inadequacy of monitoring and enforcement services in both the amateur and Citizens Band (CB) radio services. This section authorizes the use of volunteers from the amateur and CB radio services to assist the Commission in monitoring for violations in their respective services. While these volunteers may issue advisory notices to apparent violators, they may not impose sanctions or take any other enforcement action against violators. See Section 4(f)4(C) and (D) of the Communications Act of 1934.

Exemption from Secrecy Restrictions;

Questions have arisen from time to time concerning the applicability of Section 605 of the Communications Act to amateur radio. Section 605, which is intended to protect the privacy of persons engaged in wire or radio communications, expressly exempts certain communications, as follows: "This section shall not apply to the receiving, divulging, publishing, or utilizing the contents of any radio communication which broadcast or transmitted by amateurs or others for the use of the general public, or which relates to ships in distress."

Amateurs in the past have been considered exempt for the privacy provisions of Section 605 by virtue of the language cited. However, recent interpretations have held that amateur transmissions, other than general calls for a contact from any other station, are subject to the secrecy provisions of Section 605, *Reston v. F.C.C.*, 492 F. Supp. 697 (D.D.C. 1980). The U.S. District Court for the District of Columbia in *Reston* painstakingly reviewed the legislative history of Section 605 in the hope of ascertaining Congressional intent with regard to amateur transmissions as referenced in the last sentence of that section. The Court, frustrated at the lack of clear expression of legislative intent regarding the matter held that amateur radio transmissions are not exempt from Section 605 unless they are transmissions "for the use of the general public."

The problem with this interpretation is that it precludes amateur radio operators from disclosing the contents of transmissions heard on the amateur bands, even illegal transmissions. Thus, amateurs are prohibited from working together to locate and monitor illegal transmissions and unlicensed operators. Nor can amateurs be of as much assistance to Commission enforcement personnel, because amateurs cannot disclose to Commission personnel the content of transmissions received. This has already had an adverse effect on amateur self-policing efforts. Finally, the summary remarks of Senator Goldwater, K7UGA, are worth considering:

At a time of governmental belt-tightening at all levels, this bill is timely. It provides a means of cutting costs, eliminating problems which have plagued a most worthy public service oriented avocation, and yet actually permits an increase in the availability of services to amateur radio, the most self-regulated radio service in the United States. In an electronic age, it is critical to nurture an interest in technical experimentation and development. Amateur radio inherently fosters such an interest. This bill is necessary to insure continued growth of the service and its continued effectiveness as a source of public service involvement.

See you next month
73 N3AKD

Chris Imlay, N3AKD is Counsel for the American Radio Relay League, reporting to the ARRL Board of Directors. Chris resides in Bethesda, Md., not far from the center of Washington D.C. The report that you have just read is from the November issue of AUTOCALL, an amateur journal distributed in the vicinity of Washington. This report will get you acquainted with Chris and his abilities.

CHRIS IMLAY IS SLATED TO BE THE GUEST SPEAKER FOR THE FLEA MARKET DINNER '83.

HOW I BECAME A HAM

de W7JWJ

As a freshman in high school I helped operate what little multi-media equipment the school had on hand. One day three of us were assigned to operate the motion picture projector for an assembly meeting of the student body.

The movie was really dull and my buddy said, "Harry, let's split and we'll go over to my house, in the next block, and operate my ham radio." Never having seen such a device the only possible answer was a, "Yes".

And so we slid up through the hatch on the top of the projection booth, across the roof and down the fire escape, a sneak around the school grounds and we were at Wilber's home which was complete with a monstrous piece of apparatus that had been assembled on a two x two wooden frame work. It was four foot square and seven feet high. It was very impressive.

Wilber called CQ into a microphone and some strange looking light globes began to emit an eerie violet light that flickered as Wilber spoke. Smoke began to trickle from the insulation of several wires. It had the aroma of melting parafin. Suddenly while Wilber answered a response from Sandpoint, Idaho, the insulation burst into flame. Wilber threw a glass of water on the fire and quickly explained that he thought that #22 parafin wire might be a tad too small for the filament leads of his 866 tubes and that some day he was going to change those wires before his mother confined his ham operations to the garage.

We exchanged signal reports from our QTH which was in Coeur d'Alene, Idaho, and I was apparently becoming addicted to a replacement hobby for my model airplanes.

Suddenly there was a knock on the door. Wilber answered. It was the high school principal. It seems that we were coming in over the school sound system louder than the movie! Now all of Coeur d'Alene High School knew about ham radio and the filament wires that continuously caught fire!

I convinced another buddy that this was the hobby to get into. His name was 'Soupy'. He obtained a copy of the code and we ran wires between our two farms.. Wire was wound around nails to make magnets and tin cans were cut up to make diaphragms for the sounders. Oh yes, we did not know any better so we both learned the AMERICAN MORSE code. All was not lost however, because after I had graduated from high school I got a job operating for POSTAL TELEGRAPH and then WESTERN UNION and MAKAY RADIO.

Eventually I learned the correct code and rushed down to take my Amateur exam. My Operator's license arrive in two weeks. However the Station license did not arrive for another four years! Seems the FCC was interrupted by WW II.

So you also became a ham? How? Via the Dick Bash method? Perhaps the members of the Mike & Key Club would like to know! Write it up! The RELAY will print almost anything!

Speaking of Bash. Bash Bombed at Baltimore! Yes the sneaky FCC slipped in a brand new exam following one of Dick's very expensive all day seminars. 80% of Dick's students failed. 79% of the applicants, who did not attend Dick's seminar, passed the examination!

**QRM ON TWO METERS
AND WHAT TO DO ABOUT IT!!**

Ever notice the whistle or heterodyne on the Capitol Peak Repeater (N7CZX/R) on 145.250? That is QRM from the cable TV system leaking their channel "E". Part 76.605 (a)(12) of the FCC rules for CTV systems LIMITS leakage to no more than 20 uv/meter at TEN feet from the cable!!

How much is 10 uv? If you were to set the squelch on your receiver to just over the noise to receiver quieting on another frequency, then tune in 145.250 and the squelch opens, then you are getting CTVI leakage, and it is too high.

In order to get this CTVI out of 2 meters, I would like a few reports of QRM on N7CZX from mobile hams around the area. Set you rig up as above, and as you drive to work, note if the squelch opens. If it does, then note the address, cross street, house number, or a specific location. Give me a call at 226-4222 evenings or on the BEARS repeater 145.330. I'll take it from there. Eventually we'll get the stuff off the air but it will take your help and cooperation.

Same subject. If you happen to be hamming on some band and run into a strange signal, you could be hearing an "Intruder". (A none amateur signal in the ham band). If you feel it is worth it, give me a call and I'll identify it and report it to the authorities. This way we'll get more of the QRM off the lower bands too, but it takes your help cuz I can't cover all frequencies.

Gib, W7JIE, Director, Intruder Watch (AIRS), International Amateur Radio Union (IARU), Region Two.....

FLEA MARKET

The MIKE & KEY CLUB will hold the second annual Electronics Flee Market at Longacres Race Track during the weekend of March 26th and 27th. As a member of the club we ask your help in preparation for this major event. At the last club meeting the members approved holding the annual awards banquet in conjunction with the DINNER which will follow the Saturday portion of the Flea Market. Come to the next meeting if you wish to discuss the arrangements.

There will be a work party January 8 at 11 a.m. at the deJong's home. All committee members should attend, as well as interested GOLPHERS.

Do you have a computer? Chances are that we can use it during the Flea Market.

Are you a member of MARS? Are you a member of another net? Are you a member of another amateur radio organization that would like to hold a meeting or get-together during the Flea Market? Now is the time to input your desires. See you at the work party January 8th.

73 & 88 88 88 & 88 Debra deJong N7AYD...Flea Market Chairperson.....



CHRISTMAS PARTY

The annual Christmas party was held last Saturday evening. Did you see Little John & Pete Hedberg wildly swinging clubs in the general direction of each other? (Sorri - you had to be there to understand what was happening).

DO YOU BELONG?

Are you an active member,
The kind that would be missed,
Or, are you just contented
That your name is on the list?
Do you attend the meetings
And mingle with the crowd,
Or do you stay at home
And crab both long and loud?
Do you take an active part
To help the club along,
Or are you satisfied to be
The kind to "just belong"?
Do you ever try to contribute,
No matter what little bit,

Or leave the work for just a few
And talk about the clique?
There is quite a program scheduled
That means success, if done,
And it can be accomplished
With the help of everyone.
So attend the meetings regularly,
And help with hand and heart,
Don't be just a member
But take an active part.
Think this over, member,
Are we right or are we wrong?
Are you an active member?
Or do you just belong?

Thanks to SARC

THE TATE FAMILY

Have you ever heard of the famous Tate Family that used to belong to The Mike & Key ARC? There was old man Dick Tate who wanted to run everything in the Club. Uncle Ro Tate tried to change everything. Sister Agi Tate stirred up trouble wherever possible. Her brother Irri Tate helped her do so, too. Whenever new club projects were suggested brother Hesi Tate and sister Vege Tate poured cold water on the proposals. Then there was sister Imi Tate who tried to have the Club mimic all the other Seattle clubs. When the Club budget was announced big brother Devas Tate stood up and would make everyone quake. And of course, the older brother Poten Tate always acted like a big shot.

But not all members of the family were bad, for brother Facili Tate was quite helpful. A delightful member of the family was Miss Felici Tate. Two of the more stable members of the Mike & Key Club trustees were brother Cogi Tate and his twin brother Medi Tate.

From the Spire, Noroton Presbyterian Church, Ct.
(Wonder if the family changed their family name when they all upgraded from Novice to Technician and are actually still in the club?)

DID YOU HEAR?

A man decided to become a monk, and joined an order where silence was the cardinal rule. He could say only two words once every decade. After ten years, the head monk called him in. "You can say your two words now." The man replied, "Food cold" and left the office. Another ten years passed and this time the man said, "Bed hard." After another ten years, the man was again summoned into the head monk's office. "I quit," he said. The head monk replied, "I'm not surprised. You've been complaining ever since you got here."

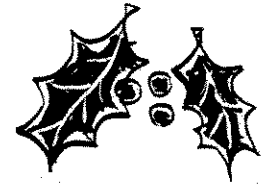
DO YOU CARE?

The International Amateur Radio Union has recommended that:

1. Each S-point is a level difference of 6 dB.
2. Below 30-MHz S-9 equals 50 microvolts across 50 ohms.
3. Above 30-MHz S-9 equals 5 microvolts across 50 ohms.



MINUTES-BUSINESS MEETING NOVEMBER 21, 1982



The meeting was called to order by Harry, W7JWJ at 10:10.

Minutes of the October meeting were not read.

The treasurer reported a balance of 1695.00, in addition to profits from the sale of food at the auction.

Gene, WA7TAI reported that Mike Lamb from Advanced Electronic Applications would be our featured speaker.

Tim, K7QMI reported that the dates had not yet been set for Santa talks.

Bob, WA7TRI reported on publication and distribution of the Relay.

Debbie, N7AVO, reported on the auction and also on the Flea Market, stating that it (FM) would take place at Longacres March 25 and 26.

Debbie also reported that the Christmas party would be held at Forest Ridge Dec. 11.

It was moved, seconded and passed that the treasurer issue checks for the expenses of the Christmas party. (\$50.00 toward hall rental, \$50.00 for music.)

An ARRL report was given by Harry, W7JWJ covering regulations on the use of newly authorized frequency bands.

Gib, W7JIE reported that the work of the intruder watch and the volunteer monitors were to be more closely coordinated.

Jim, W7GPW reported that the Mike and Key club had placed third in our class in the 1982 Field Day and that our weakest areas were 15 and 40 meter CW.

It was moved, seconded and passed that we adjourn.

Following a brief recess, it was moved, seconded and passed that we accept JON SORENSON, K WNE as a member of Mike and Key.

Mike Lamb from Advanced Electronic Applications gave a demonstration of some new CW equipment capable of incredible QSO's.

Respectfully submitted, Burr

NEW ASSISTANT DIRECTOR

Effective 12 noon November 20th, 1982 M (Gib) Gibson, W7JIE was appointed as Assistant Director by Mary Lewis, W7QGP ARRL Northwestern Division Director. Gib will submit input and advice concerning the Intruder Watch program.

PROGRAM

The December program will consist of a slide presentation called "Service Beyond Subscription" which is a new production from ARRL headquarters.

Recently the game warden apprehended Gib, W7JIE at the fishing pond and asked?

"Are you fishing without a valid 1982 fishing license?"

Gib replied,

"No I'm just fishing for the ones that got away last year."

(Gib has frequently puzzled us with his infamous questions that have questionable answers. Please bring your question to club meeting and this month we will all ask Gib the questions'!!!.)