## THE HAMPDEN COUNTY RADIO ASS'N. Inc.

### SPRINGFIELD. MASSACHUSETTS

**7FRO BEAT** 

31st year ARRL Affiliated

JANUARY, 1979

Winner, Certificate of Merit, N.E. Newsletter Competition, 1978 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Don't Miss These:

VHF SWEEPSTAKES - January 13 14

SIMULATED EMERGENCY TEST- January 27,28

SPECIAL EVENT STATION AT THE 1980 WINTER OLYMPICS! \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

NEXT MEETING:

FRIDAY JANUARY 5TH AT 8 PM

LASARS, HOLOGRAMS, LASAR OPTIC COMMUNICATIONS!!!

(FILM BY ACIT ON THE SEPTEMBER SS AT WINY WAIRWU will answer Questions about the upcoming VHF SS.)

VHF SWEEPSTAKES BY FRANK POTTS, WAIRWU

Once again VHF Sweepstakes time is almost upon us. The 1979 SS will be somewhat different than those in the past. First, the MTARA and the HCRA will not be competing against each other as they have been in past years. This year MTARA/ HCRA joint members are encouraged to submit their logs to the Hampden County Club. (Hams that are members of only the MTARA will of course only submit logs to Mt. Tom) Under the new ARRL club competition rules, (See August QST, p. 66), the clubs should be much more competitive than they have in the past. Full contest rules will appear in the December issue of QST.

This year's contest should also produce higher individual scores due to the increase of club members and activity. Those with the new multi-mode rigs will have a good chance to take full advantage of their capabilities. What better time to try out that new rig, preamp, antenna system or whatever? Members who are limited to FM should be able to make many contacts on the simplex frequencies. (See rules for possible frequency and time restrictions.) Anyone wishing to operate the contest and does not have equipment or antennas should contact either WAIFCR or WAIRWU. We will make every attempt to set you up with something. Those who have surplus equipment they would not mind lending out, please contact us. There will be one or more multi-operator efforts within the club, and judging from past experiences help in any form would be appreciated. (i.e. cooking, antenna work, operating, logging, etc.)

Those who are limited as to the time they can devote to the contest, should make a concentrated effort to get on at the same time. 6 to 10 pm on Saturday night and 3 to 6 pm on Sunday might be ideal. Remember, even if you only make three or four contacts this could literally mean thousands of points for the club if some of the big stations with many multipliers are worked. (If you work WlNY you can also get the QSL card!) Attached to this newsletter is a log sheet and summary sheet which are required for the contest. Additional log sheets will be available at the January meeting. Please forward them at your earliest convenience to: FRANK POTTS, WAIRWU, 154 SOUTH LOOMIS ST., SOUTHWICK, MASS 01077

So let's get on the air the weekend of January 13 14 and make the 1979 VHF Seepstakes the biggest and best ever!!!

Jan 13 at 1800Z

#### JOTTINGS

NlABJ checked into the WMN. FB, Bob and don't sweat it, those Q signals will soon make sense...John, DAlUY/KAlCZ has been trying to get into the 10 meter net on Monday nights from Germany. He's looking for a two meter rig of any type, his address is CW3 John Haskell, HO 7th sig bde, APO New York, 09028...WloV sends his regards to all his old friends in the club. Bob enjoys ZB a great deal... \*\*\*\*\*\*\*\*\*\*

#### CHRISTMAS PARTY REPORT

On December 8th, 130 club members and assorted XYL's/YL's partied at the Holyoke Elk's Club. Ron, WBlETS put together a superb party, with excellent facilities, food, drinks, and music. Many people won door prizes, and the dance floor was always full. WIMM was even out there two-stepping! The only radio club business conducted was to announce that WIKK, Art Zavarella is now a life member of the HCRA. Many thanks to Ron Beauchemin, WBlETS, Moe, WBlFIP, Art, WBlFIJ, (A good dancer, too!), Al, WBlEMN, and everyone else who contributed to make this such a memorable occasion! (Ron is already planning the 1979 Xmas party.)

#### MEMBERSHIP GOINGS-ON

The six meter net is being revived by the club. No longer just AM, it'll meet on Thursdays at 8 pm on 144.120 mhz. WAIRWU will be the ex-officio net manager...NIFJ had his QRPp article re-printed in "World Radio News". HCRA and ZB were also credited...WAlRWU. WB1CAC, KAlapr, Walecr, Wallpj, Wlkk, and soon-to-be-licensed Rich and Bill put together a fantastic effort on the ten meter contest. Over 1400 contacts all across the globe!...WlUKR/WlKUL helped WAlORT et al when icy Monson roads caused them to skid off the highway... The VHF SS effort continues to build. Some members spend all year getting ready for it! Even if all you can get on is a simplex FM frequency, do it. The club multiplier will go way up. Get your logs back to WAIRWU early...WBIAPD, (XOM of WB1EHS) is enjoying his five week vacation.....

#### NOVEMBER MEETING REPORT

Gerry, WAlPGT and Dr. Ted Scott put on an excellent computer show for 150+ people. Seven systems were demonstrated, with varying degrees of sophistication. If you weren't there, you missed out on a good meeting. Thanks to Gerry and Ted.....

ZERO BEAT IS HUGE THIS MONTH BECAUSE WE WERE LIMITED TO SIX PAGES IN DECEMBER. THIS IS AN EXPERIMENTAL ISSUE. IF YOU HAVE EYESIGHT PROBLEMS, YOU CAN REQUEST IN WRITING TO RECEIVE FULL SIZE PAGES. PLEASE DON'T REQUEST THIS UNLESS ABSOLUTELY NECESSARY. IT'S EXPENSIVE! just find out more, contact Bill at: Commonwealth Ave, Great Barr-

#### HCRA WORKED ALL STATES CONTEST!

This popular contest from the past is back! Everyone who enters will receive a certificate. The top scorer will be the receipient of a beautiful plaque with their name and call letters. It's an easy, fun contest. Here are the rules:

- 1. Open to all HCRA members.
- 2. Contacts on any band count one (1) point for each state.
- 3. Maximum number of points per band is 50. Mode doesn't matter.
- 4. Highest score wins. Contest runs from February first, (0000 Z)
- to March 31st. (0000 2)
- 5. Submit logs or photostats with computed score. QSL cards not required.
- 6. Winner will be announced in the May ZB. Keep us informed of your progress.

Help Create Radio Activity!!!!

Multipliers:

Novices; Multiply total score by 2

Technicians: Multiply total score by 1.5

General/Advanced: ADD 10 points to your total score.

Amateur Extra: No multipliers!

#### NOTES FROM THE DECEMBER, 1949 ZERO BEAT!

Lew McCoy, an old friend of the club, spoke on the Communications Department at the Leaque. John Cann, WlACM, talked on cw traffic handling and the best way to send a message from Springfield to Inner Mongolia...Percy Noble, WlBVR spoke on proposed opening of 20 meter phone frequencies if we get use of a 15 meter band... ZB has five associate editors handling departments like contests, DX, traffic, Technical Tips, and Trading Post. Postage cost 2¢ to mail the newsletter...WlNY, the "Tom Swift" of Wilbraham built a small (?) six meter rig that works. (5x7x2 chasis)... WlPHU reports his new "cascade" preamp has got him onto the high end of ten meters...Pleas for participation on WMN by WIRHU, "We will QRS if asked!" (sound familiar? ..editor)... WlCJK and WlPDF made DXCC list...WlMQK reports QSO's with Russia and Africa...WlCJK winning DX phone contest...Another FB technical article by WlOWJ. (We hope to reprint some of these!..ed)...... \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### SCM? WHAT'S THAT???

The SCM is the leading official of all League sponsored operating activities within the section. The Section Communications Manager for Western Mass is Bill Lowe, WlTM. He's responsible for the National Traffic System and the Amateur Radio Emergency Service, the two sub-parts of the Amatuer Radio Public Service Corps. The officials who run these are appointed by the SCM. The SCM is also expected to promote a wide range of amateur activity and enthusiasm within the section. If you'd like to help out or ington, Mass. 01230.

#### MESSAGE FROM 3C123

The "Cyclops" moved slowly. Over one thousand dishes, each as large as a football field, centered on 3 C 123. Our coded messages sent 2,000 years before had been answered from space! The masar receiver, and "UBI 10" computer traced out the continuous message travelling all of these light years. The pulsing was based on a code devised by a long-dead scientist, as was everyone else who'd started this project. Mankind experienced a profound shock; intelligence existed elsewhere in the universe. The coded pulses slowly printed out:

\*\*\*\*\*\*\*\*\*\*\*\*

#### JANUARY MEETING

Thanks to Chet, KlYQQ, on Friday, January 5th, Dan Courtney of Springfield Technical Community College will speak to us on LASARS! His presentation will cover lasar optics, optic communications, and holograms. A ruby lasar will be demonstrated. Slides will help illustrate this talk, which will be geared to the lasar novice. If you have any "science wiz-kid" friends, invite them along. Don't miss this important technical meeting. See you there. (A film by ACIT on the VHF Sweepstakes at WINY in September will be shown. Logs and other information on the January SS will be given by WALRWU, Frank Potts.)

#### MISCELLANEOUS NOTES!

WIUWX has been in the hospital. Hope you're better, Cliff, and don't have to operate the SS from a bed!...Ollie, NIAFK is working to get his code speed up for the Extra. Why not check into the Western Mass Net on 3562 every night at 7 pm?... KIIJV/KIIJU put up a new tower with the help of KITF and WIJP. Typical of Norm to wait for cold wx and blizzards... The FCC will be in Hartford January 29, 30, 31st. Send in the form 610 now marked "I will appear for exam in Hartford"... Next Hartford exam is April 24, 25, 26...

THIS IS A ROUND TUIT.
AT LONG LAST WE HAVE A SUFFICIENT
QUANTITY FOR EACH OF YOU TO HAVE YOUR
OWN.

THESE TUITS ARE VERY HARD TO COME BY, ESPECIALLY THE ROUND TUITS. THEY ARE TRULY INDISPENSIBLE ITEMS. THESE TUITS ARE ESPECIALLY DESIGNED TO IMPROVE YOUR EFFICIENCY.

FOR YEARS WE HAVE HEARD PEOPLE SAY,
LL DO THAT AS SOON AS I GET A 'ROUND TUIT." SO . .
WE HAVE BEEN ABLE TO PROVIDE YOU WITH A TUIT
F YOUR VERY OWN . . . INDEED . . A ROUND TUIT.

GOOD LUCK TO YOU! .

TNX-WALZKT

### Laws for Hams to Live By in Moments of Trouble

LASAR

- MURPHY'S LAW: If something can go wrong it will
- BROWNWORTH'S LAW: Any time things seem to be going better, you've overlooked something
- PLUMBER'S LAW Nothing is impossible for a man who doesn't have to do it himself.
- PINACLE'S LAW. Once a job is fouled up, anything done to improve it makes it worse.
- BRD'S LAW: There's never enough time to do it right, but there's always enough time to do it over
- DINGLE'S LAW: When somebody drops the ball everyone else will kick it around more or of packing it up!

## "Limeaut!"

by Mike Adlerstein, KIFB

I recently had the rare treat of playing with two fine, new HF transceivers, side by side, for several fun-filled hours at a friend's shack. The two units were the Drake TR-7 and the I-COM IC-701. Each was fresh out of the box and we nearly wore out the antenna switch, going between the two rigs.

My impression of both rigs were favorable though I found the I-COM to offer many more features and at a lower price. Rather than reproduce the "spec" sheets which are available from the manufacturer, I will describe the most striking aspects of the equipment.

The TR-7 is a very "basic" radio. It comes with only one built-in IF filter and one VFO. Many of the planned accessories are not yet available. The operation and feel of the receiver is very similar to the R4C and one is tempted to think of the TR7 as a repackaging of the TR4Cw with a solid state final and digital readout. The receiver was sensitive and with the optional filter, (which I installed), quite selective. There were two disappointments, first, the matching power supply was bigger and heavier than the transceiver. Second, the manual is very poor, omitting even a schemat -ic diagram of the radio. The service section is one page long, consisting of the address of the R.L. Drake Company.

The I-COM IC-701 offers similar sensitivety and selectivity as nearly as I could feel by ear. It comes with built-in IF filters and two VFO's, (both digitally synthesized). Included in the transmitter section is a speech processor. Little extras like a built-in fan and microphone are included. The radio is small, compact and very convenient to operate. On the negative side, some of the audio reports we got with the speech processor in, were mixed. Also, the radio will not operate at all outside the present amateur bands without additional equipment. Thus, if the WARC slips the bands 50 KHz, you'll be excluded. Thirdly, the radio is extremely complex. This makes maintenance a problem even with the good manual provided,

If you are thinking of purchasing either of these new radios, it would be worthwhile for you to shop around, nation-wide. You could save several hundred dollars by so doing.

<sup>18</sup>• de Mike Adlerstein, KIFB

### NEW CLUB NEMBERS

Art, WB1FIJ Ed, WA1YQY

Bob, WINYP Larry, WEIGUS

Fon LeMay Steve, KAlAGQ

Gary, ABII P.R., WEIHEE

Greg, NIAEH Marcia, KAIAKM

Don, WAISDY Doug, WBIDLT

Leon, WB1DCB

P. Tureotte, KAIBBA

HAM PILOTS: BRING IN YOUR FLYING SLIDES TO SHARE WITH YOUR FRIENDS:



## The Spark Gap



Thanks for use of KIFE's article!

All amateur radio operators who are interested in taking part in the annual Simulated Emergency Test (SET) exercise which will again take place in January, 1979 should read all the info contained in the December '78 QST, page 77. The message

format for SET, as described in OST, should be clearly understood and adhered to. Net sessions for both HF and VHF operations involving the NTS (National Traffic System) and ARES (Amateur Radio Emergency Service) within the Western Mass. Section will shortly by formulated and should appear in newsletters in early January. Hams not presently familiar with traffic and emergency net operations should get accustomed to net procedures prior to the SET by listening in and participating in one of our regularly scheduled HF or VHF nets. The point brought out in the last paragraph of the SET article in OST cannot be overemphasized!

If you'd like to join the ARES, complete the enclosed form and mail to: Robert Phoenix, WAIDNB 121 N. Main St;K-7 Belchertown, Ma 01007 Do not join if you aren't ready to participate often.

SET JAN 27TH28TH

1.	Name:					2. C	all:				
	AMATEUR RADIO					SE	RV	ICE	1		
3.	Address:										
4.	City:	5.	State/P	rov.:				6. Zip:			
,	County:	8.	Home p	none:			T	9. Bus	phone:		
10.	License Class:	11. Primary radio interest:									
12	(Circle bands you can operate) CW:	160	80	40	20	15	10				_
	PHONE:	160	75	40	20	15	10	6	2AM	2FM	
	MOBILE:	160	75/80	40	20	15	10	6	2AM	2FM	٠
13.	Can your home station operate without con If yes, what bands? 160 75/80 40	nmere 20		er? [	] Y	ES 2AM	21	]Νο • Μ			
14.	Request FULL meinbership LIM	TED	member	ship			_				
15	Signed:					16. D	ate:			19	

73, Bob, WALDNB

#### JOTTINGS

Jim, W1RBU took some great slides of our November computer meeting. We hope to show them soon...Roger Roy needs a ride to meetings from Holyoke. Donations of old ham magazines and a useful HF receiver to borrow would be appreciated. His phone number is 534-3715...W1NY did well in the September VHF SS, and the UHF contest as you saw in December QST. Frank Potts said we were 12th and 5th in the country! FB on a job well done to WAlRWU, WALECR, ACIT, WB1CAC, KALAPR and W1KK...

#### AMATEUR RADIO GENERAL LICENSING COURSE

BEGINS WEDNESDAY, JANUARY 24th

TEN WEEKS, 7 to 9 pm

JEWISH COMMUNITY CENTER

DICKINSON ST., SPRINGFIELD, MASS

7

#### COURSE CONTENTS:

AC AND DC THEORY MODULATION
DIODES AND POWER SUPPLIES RECEIVERS
AMPLIFIER THEORY FEEDLINES
OSCILLATORS PROPAGATION
TRANSISTORS INTEGRATED CIRCUITS

FCC RULES AND REGULATIONS

Course will cover everything you need to know to pass element 3A for an amateur general or technician's license. No morse code will be taught! Students are expected to have a basic novice level understanding at the beginning of the class. Enrollment is limited, course fee is \$20.00

Instructor is Jeffrey J. Duquette, KlBE, holder of Second class commercial license with radar and amateur extra class tickets. Slides, films, demonstration, lectures, and practical testing will be used. Textbook will be the "Radio Amateur's License Manual". (Costs \$3.00) HOMEWORK IS REQUIRED!

TO ENROLL, CALL THE CENTER AT 739-4715

GENERAL LICENSE CLASSES will be held at the Putnam Technical High School in Springfield starting January 23rd, 1979.
Registration will begin on Monday night January 8 through Monday January 22nd, 6:30-8:30. (Mon through Thurs) The Radio Amateur's License Manual will be used. Everyone is welcome. Fee is \$10.00 for intown students, and \$20.00 for out of towners. Free for intown veterans. Norm, N1PF, be looking for you.

Provin Mountain ARA will be having NOVICE/GENERAL LICENSE COURSES again in 1979. They meet on Monday nights at the Red Cross Building on Maple Street in Springfield. Contact Chick Boilard, WAlVCU on the .10/.70 machine or at 543-1836.



" I JUST CAN'T WAIT TO GET IN ON THE VHF SS!!! "



#### XIII OLYMPIC WINTER GAMES 1980

ADMINISTRATION CENTER
P.O. BOX 1980
LAKE PLACID, NEW YORK 12946

PHONE OLYMPIC 3-4211 (AREA CODE 518) TELEX. LPOOC 954632 RONALD M. MACKENZIE President

> ART DEVLIN Vice-President

REV. J. BERNARD FELL Executive Director



## Lake Placid Olympic Organizing Committee

MEMORANDUM # COM-78-77

DATE:

November 13, 1978

TO:

Ronald M. MacKenzie, President

FROM:

Brian Fovel, Deputy Director of Communications

SUBJECT:

Official Winter Olympic Radio Amateur Network (NORAN)

#### WORAN

#### BACKGROUND

During the 1976 Olympics in Montreal, licensed Radio Amateurs handled 12,000 radio messages to and from Montreal from all over the world. 60% of these messages were outgoing from athletes and 25% were incoming for athletes. Other messages were handled for the general public as well as Olympic officials. Traffic and road report information was also relayed.

Historically, amateur radio has provided considerable public service and especially emergency assistance in time of disaster (earthquakes, floods, hurricanes, riots, etc.). Amateur radio is dedicated to public service and public service is one of the primary reasons for its existence and the support provided by the FCC and the World Padio Conferences. For those unfamiliar with amateur radio, it should be pointed out that it is not Citizen's Send (C.B.). Kadio Amateurs are highly trained communicators and technicians who must successfully mass Federal Communications Commission (FCC) administrate deaminations in cadio theory, communication left, potential and international morse code.

#### PROPOSAL

An organization of amateur radio operators (chairman: Lincoln Dixon), has been established consisting of individuals from Lake Placid, Saranac Lake, Plattsburgh, Tupper Lake, Montreal, Burlington, Vt., and other communities in the north country for the purpose of providing worldwide communication into and out of the Olympic area during the 1980 Olympics and Pre-Games periods.

The organization has been unofficially designated as the Winter Olympic Amateur Network (WORAN) and requires official Olympic sanctioning in order to proceed with their planning and implementation.

Manufacturers are standing by ready to donate equipment for their use.

November 21, 1978

Jean Peacor, KlIJV Country Club Drive Monson, Mass. 01057

Dear Jean.

In reference to your letter of November 5, 1978 and your suggestion for an official Olympic amateur radio station, I wanted you to be aware of the plans underway to do this exact thing.

By the time you receive this letter we should have approval and Olympic Committee sanctioning of what we are calling WORAN - Winter Olympic Radio Amateur Network. Rather than explain its function here, please see the attached letter of November 13, 1978 which is quite detailed and should be self-explanatory.

We have received numerous letters from amateurs and clubs who would like to help out. These inquiries are being forwarded to Mr. Lincoln Dixon, Chairman - WORAN (c/o Adirondack Engineering Corporation, Bloomingdale, New York 12913). The attached form should be completed and sent to Lincoln if you are interested.

I am trying to discourage individual clubs or organizations from setting up stations in this area during the Olympics and for obvious reasons. There will be over 40 foreign teams with radio, numerous companies with high power base stations, 35 Olympic channels, security forces with radios, WORAN, RCC's, and on and on. As you can see, the RF density is going to be unbelieveable and we expect to have some major desense and intermod problems. Of course, we have no control over who comes in with radio and certainly low power mobiles are not a concern, but higher power stations operating out of trailors or camps, etc., could be a problem if they're not "clean".

In regards to a WORAN call sign, we may still be able to obtain a special call and I will be working on this with the F.C.C. Thank you for your offer of WINY but we better hold off on that.

Thank you very much for your inquiry and I hope I will see you here during the Olympics helping out with WORAN.

If you have any questions or comments, I would be pleased to hear from you.

73, Buen

Brian T. Fovel,
Deputy Director of Communications

C: Kathy Rogers, Official Housing Lincoln Dixon, WORAN Bobbie Chamalian, ARRL Lee Borland, LPOOC WORAN will be prepared to handle worldwide messages on a no cost basis for athletes, visitors and officials and on a non-interference basis with commercial carriers.

An amateur radio station would be set up in Lake Placid via a VHF repeater network (already in use) to outside locations such as Tupper Lake, Saranac Lake, Burlington, Vt. and Montreal. Messages would then be relayed via regular amateur radio networks to their destinations throughout the world. Within 24 hours a message can be relayed from Lake Placid to Europe or Japan or elsewhere.

The American Radio Relay League is very supportive of this program and has offered to assist in any way possible.

#### SUPPORTING INFORMATION

- -- Amateur radio operators are planned for to provide the communications support along the Torch Run route and arrangements for this are being finalized with Garyian Butler, Technical Director for the run.
- -- The local amateur radio community has volunteered to install and tune 25 mobile radios which the LPOOC needs for the administrative radio system. This will save approximately \$250.00 per radio (\$6,250).
- -- The Rochester Amateur Radio Association has agreed to re-crystal and tune 165 used Motorola pocket pagers to be put in use by the LPOOC in 1979 and 1980. This will save approxiamtely \$40.00 per pager (\$6,600.).
- -- Amateurs will be involved with road and traffic reports through the Tupper Lake repeater system which has wide area, reliable coverage (FM) from Watertown to Montreal to Burlington to Albany and Utica. This activity will be independent of the message handling network described in the proposal section.
- -- The LPOCC will be able to draw on the amateur radio community for continued communications support. They have always proven to be ready, willing and able.

#### THE REQUEST

It is requested that the LPOOC officially sanction the Winter Olympic Radio Amateur Network (WORAN) and authorize them to function as the official amateur radio organization during the Olympic and Pre-Games periods. They should have full authority to use the Olympic logo to publicize their volunteer activities and services.

1. Club name and address	HAMPDEN COUNTY RADIO ASSOCIATION, INC
-	P.O. BOX 216, FOREST PARK STATION, SPRINGFIELD, P
2. Send correspondence to	JEFFREY J. DUQUETTE, KIPE
at_	P.O. BOX 346, SOUTHWICK, MASS 01077
ALL Have had	members wish to assist  experience with communications of a message nature at booth situation
4. Our plans include: WE WO	OULD LIKE TO HELP BY MANNING THE HF STATION.
WE WOULD PRING OUR (	OWN EQUIPMENT IF NEEDER. MEMBERS HAVE HAD
A LOT OF EXPERIENCE	IN TRAFFIC AND PUBLIC RELATIONS. WE
PARTICIPATED IN THE	KMICC OPERATION ON CAPE COD. WE ARE ALSO THE
CALL AREA NUMBER ONE	
(callsign)	Fraction media
6. We suggest the following PE READY TO HELP IN	to other clubs wishing to take part: BIG AND SMALL WAYS. CAREFUL PREPARATIONS
-41	ON SUPPLYING 90% OF NECESSARY EQUIPMENT.
7. We suggest that ARRL parts  NTS READY FOR ALL OF	Icipate by: PUBLICITY IN QST, GETTING THE TRAFFIC.

#### ZERO BEAT JANUARY

#### OLD TIMER'S RIG.

"This old rig is a miracle of craftsmanship!". I thought. "How did they ever operate these old things?" The spark gap transmitter I'd bought glistened like new. The huge glass capacitors gleamed, the coil couldn't wait to be energized, and copper glowed on the transmitter. Not wanting to be too authentic, I'd wired it up to a car battery. The receiver tuned 100 to 300 meters by using a coil you pushed in and out. Detection was via a galena crystal and "cat's whiskers" into Murdock earphones. I knew it was illegal to fire up the transmitter but I had to know if it worked. "Ah, heck, a quick CO won't hurt anybody." The buzz-buzz-buzz sounded neat, especially watching the spark jump across the gap. I put the earphones on so that I could hear it over the air. When I stopped sending a strange thing happened: a raspy note came out of the 'phones, a different tone than I'd ever heard. What was that callsign? lAIG? Yeah, for sure it was, "lAIG, K" I answered for chuckles, knowing someone had heard me testing, and was making a joke. The operator came back, his name was Art and he was in West Hartford, weather there was rainy, and he's using the radio in the barn. Wow, this guy is a nut, my OTH is only 20 miles from Hartford, and the sky is clear. The morse was getting very weak, but I still could copy, wait a minute, what's this?

"Do U think the U.S. will enter war in Europe? General Pershing will give them a run for their money. K " I answered but the signal was gone. Was this old receiver storing signals in the capacitors? Had this morse been bouncing around in the ionosphere for 50 years? Now I'll never know... KIBE

#### MISCELLANEOUS NOTES

Kevin, WAlJUJ, will be home from overseas in December. He wrote that he can't wait to get into the SS...Frank, WAIRWU will soon have his earth-moon-earth station on the air...Art, WlKK, got some new antennas up before the cold weather set in...Al, WB1EMN has 16 soon-to-be novices in his license class... WBlDLE listens in to the 10 meter net Monday nights, but can't check in due to TVI... W1BVR put up a new antenna with W1DVW's help... Ham Radio Horizons will print the article about the HCRA probably in the February issue. Don't be surprized to see yourself!...Jeff, KIBE has had a short story accepted by Horizons. It's about hiking, hamming, and WlBVR, Percy is featured in it...



#### BUILDING A STATION FOR RECEIVING SATELLITE TELEVISION

By Jeffrey J. Duquette K1BE (First of Five Parts)

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Television signals are now relayed all over the world via satellite. You can eavesdrop on them and have "free" cable TV with over 40 channels. Not only that. but no commercials or censorship. Videotaping for your own use of movies and live broadcasts can be used for hours of enjoyment. This series of articles will explore how to go about setting up a receiving station to catch all of these interesting signals floating by. I'll start with a few satellite basics, go into specifics about television satellites. what's required for receiving equipment, and then what antenna designs are required. (point of closest

approach to center of attraction) velocity

Fig 1

Satellites orbit the earth. The type of orbit they are in makes a difference. Most of the TV relav satellites use synchronous orbits, with perigee and apogee equidistant. (See Figure #1) This means that the satellite's period is just about 24 hours. OSCAR orbits are low, that's why you only get about 20 minutes access time. The area on the ground the satellite can reach depends upon how high it is. (See Fig. 2) Just like the more familiar mountain top machines, satellite repeaters have more coverage with higher orbits. Fortunately most TV relays are in a high synchronous orbit. This means that you'll only have to point your antenna at one spot in the sky. No elaborate tracking systems or azimuth motors are required. Once you're all set up and receiving pictures, you can leave it on one satellite, or change it to others. Not just U.S. satellites are avail-

In the next ZB, I'll cover more specifics, the frequencies involved, and receivers required. Read up on this subject! The ARRL has a good book on OSCAR.

able, but also Russian, etc.

73,

R RADIUS OF EARTH (3440 N MI)

# CENTRAL ANGLE SUBTENDED BY GREAT CIRCLE HALF-ARC TO BE CBSERVED

S MAXIMUM SLANT RANGE

8 LINITING ANGLE OF VISIBILITY (DEPENDING ON SENSORS AND MISSION) MINIMUM SATELLITE ALTITUDE SUCH

Fig 2

Node (where satellite is directly

Apogee (point of maximum

distance from

center of attrac-

tion) velocity is

overhead on the equator)

THAT PEQUIRED AREA IS OBSERVED

Jeff

Global area observed by a satellite.

## Contest Operating

By Roger Corey, WIJYH

For thousands of years the minds of men have conceived laws and doctrines designed to govern the actions of their contemporaries, but like all other human creations, the laws of man have been broken, the doctrines revoked and the way of life which each generation believes its own demands new rules. Nature's laws alone remain unchanged. Thus the ant works, the grasshopper plays and the tiny Lemming, driven by an unconquerable inner force, periodically rushes to the sea and ultimate self-destruction. Thus too, thousands of amateurs, driven by a competitive spirit which Nature has decreed that each of us must possess, rush periodically to the shacks to call "CQ contest." While it is doubtful that anyone will ever take the trouble to make the Lemming's icy plunge any more comfortable, we believe that an attempt to make amateur radio contest participation less painful would be a humanitarian effort worthy of considerable merit.

If McCaulay's schoolboy were alive today he would be well acquainted with the fact that the greatest single factor in successful contest work. and the enjoyment thereof, is EXPERIENCE. He would also be aware that a great deal of needless effort may be expended in gaining experience if proper guidance is not available and that experience is a great teacher only when the student is aware of what he wants to learn. This article, therefore, is written with the hope that it will aid the contest new-comer in gaining useful experience and also provide the more experienced contest man with a check-list with which he may sharpen his technique. A careful review of all post-war handbooks and amateur magazines reveals that nothing has been written covering the complete subject of contest participation. However, there have been two very excellent articles published. each covering a specific phase of the art which should be on the "mustread" list of every contest man. They are "Care and Feeding of Contest Operators" by J. H. Paddon, VE10U, in January 1951 CQ, and "Contestmanship" by G. F. Montgomery, W3FQB, in August 1951 CQ. We should like to give the full subject as comprehensive and competent a treatment as these authors have given their chosen phases, but we have neither the skill nor the space available. Consequently, we submit the following summary as the best means of fulfilling our objectives commensurate with our limitations.

- I Physical Condition (see Paddon, Care and Feeding, etc.)
  - 1. Start the contest well rested and in good health.
  - 2. Don't overeat or depend on stimulants to keep going.
  - 3. Make certain the operating position is as comfortable as possible.
  - 4. During the contest, rest before getting overtired.

#### II Mental Condition

- Set a goal. Either enter to win for your area or try for a certain number of contacts, score or multiplier. If you reach your goal during the contest, set another a little higher.
- Keep alert at all times. Every second of operating time should be devoted to attaining the goal.
- 3. Mental activity should be confined to planning the next contact. The one in progress should be automatic.
- Forget everything except the contest. This is probably your one chance to stop worrying about loused-up world events so make the most of it.

#### III Equipment

- VFO, break-in and fatigue reduction devices, (noise limiter, monitor etc.) are musts.
- Bandswitching, single control tuning or separate transmitters are highly desirable. It is also handy to have a direct-reading clock.
- 3. A clean signal with plenty of punch and good keying or limited bandwidth modulation will produce a greater number of contacts.
- 4. Spare tubes and parts should be kept on hand.

#### IV Operating (see Montgomery, "Contestmanship")

- Thoroughly memorize all rules of the contest so that you may take advantage of all possibilities of increasing your score.
- Determine the shortest possible transmission which can be made, practice, if necessary, before the contest until it becomes mechanical, and stick to it.
- Send information only once and repeat only when asked and only the portion asked.
- Spread operating time over as much of the contest period as possible taking several brief rest periods in preference to one long one.
- 5. When calling another station in domestic contests, zero beat exactly with his carrier. In DX contests listen carefully for calling instructions, follow them when given and otherwise call where you think he is listening. (This latter subject is now being offered in several colleges in courses on extra-sensory powers.)
- 6. Maintain lists of stations worked to avoid duplicate contacts.
- 7. Learn to listen to several other stations while copying one, thus when the contact is completed an instant decision can be made as to whether to call CQ or to call another station.
- 8. Notice what others are doing. For example: If you hear W4KFC say "Tnx for new section" near the end of a contest, the chances are that it will be new for you too, so stick around.
- 9. Take pains to make your sending readable. A moderate, steady speed (20-25 w.p.m.) will produce better results than fast erratic sending and on voice, clarity of enunciation is more important than rapidity of speech.
- 10. Never give up. The last five minutes of the contest could bring five new multipliers!

To summarize, the contest operator must be in top physical condition, be mentally alert, strive for peak efficiency in operating and have a quiet, cooperative family. If, after conscientious application of all the above principles and after at least two years of contest experience you still cannot produce a winning score, the writer will, upon receipt of three worn bug paddles, furnish an engraved, black-edged certificate of sympathy and an assortment of Mickey Finn recipes suitable for feeding to close competitors at pre-contest gatherings.



No matter how "new" your equipment is, or whether or not you operate portable, fixed or "mobile",

GET IN ON THE VHF SWEEPSTAKES!!!!!

Remarks Made by Howard Cutting at the "Past President's Dinner", February 5, 1965

While Hampden County Radio Association isn't to be confused with any preceding club activity in this area, I want to touch briefly on some of the pioneer activities that go back many years, and I would like to have you note how many individuals we know that have sustained an interest in the hobby for forty-five years and more.

In 1919, WIUD, the late Ike Creaser, headed a group that met in the State Street Baptist Church and at his shack. This group hung up many firsts in radio -- broadcasting the Willard-Dempsey fight, sponsoring a Hamfest in 1928, working with the military in the early air races around 1931 at Bowles Airport, and serving as a relay group for military traffic.

Back in 1923, as many of you know, Howard Gurney, WlIC, still going strong, scored a first by setting up receiving gear in the Hampden Church so that the congregation could hear the service from the South Congregational Church in Springfield, when their own pastor had to be absent. Howard's feat made the New York papers, and they called it a big step forward in the use of radio.

Going ahead some years, the Springfield paper of May 24, 1931, carried a picture of the radio club at that time with a membership of 25, and to show you how hams continue their interest, I'll call the role so you can pick out the names of those you know or remember, because some are "silent keys". President, Percy Noble; VP, Harry Fisk; Ike Creaser, John Burdett, Cy Sias, Frank Cushing, Mal Robertson, Fred Robertson, Ray Clancy, Don Cole, Ed Swanson, Carl Honiker, Earl Hewison, M. Hill and E. Cushing...

On the same page of that paper was a flash that may interest our guest from Headquarters. Here it is -- WIBDI had just relayed to W3BWT in Washington, D.C. a message he had received from Beirut, Syria, from the National Geographic expedition saying that they had just entered the sacred city of Meshed in Persia.

In 1933, a ham well known to all of us, WIHDQ, got his ticket.

In the latter part of the 30's, there was little if any club activity so far as I can determine, but hams were active in DX contests, experimenting with 5 meters, handling 1938 hurricane traffic, and participating in Army Amateur Radio System drills and traffic handling every Sunday morning at 9 o'clock.

Amateur activity came to a near standstill soon after our drill on Sunday, December 7, 1941, when word was flashed of the Japanese attach on Pearl Harbor. All amateur gear had to be reported to the government, and all hams had to report at Police Headquarters for finger printing.

During the war years, younger amateurs were in service, while the old-

2

sters went into fixed or mobile  $2^{l_2}$  meter emergency set-ups. Operators of these units had to carry special identification so they could move about during alerts or black-outs without being detained by the police or air raid wardens.

With the opening of the 2 meter band after the war, 144 mc. groups were quickly formed all over the country, and the hams in this area were no exception. Although VHF activity was excellent, it did not have the breadth of appeal and interest to fill the void that an honest-to-goodness and well balanced club could do.

Consequently in November of 1947, amateurs KUE, JQ, FOF, JYH, NY, KFV, IJT, OBQ, APA, LRE, and NLE, decided that a club was badly needed. All these fellows had seen clubs come and go, and so they were determined to create a frame work of by-laws and constitution that would stand the wear and tear for years to come. How well they built we all know.

After much thought and discussion with amateurs interested in all the different phases of our hobby, The Hampden County Radio Club was offered to all amateurs of the area in a kind of package deal in October, 1948, and the first annual meeting was held the next month.

It is quite significant that many of the original creators of the club are still among us, and may I read the first slate of officers. Pres. Gil Williams, WIAPA; VP - Wes Thayer, WILRE; Secretary Clarence Bordeau, WIIJT; Treasurer Bob Adolphson, WINLE. Exec. Comm. - W1 - APA, LRE, IJT, KUE, EOB, JYH, KFV, OBQ, QXV, QWJ, and RFU.

Rog Corey, WlJYH, realizing that club members needed some medium to keep them in touch with club activities, conceived the idea of a monthly bulletin, and found himself stuck with the job of editor. The end result was our Zero Beat which has gone out to members ever since, and it has been credited with keeping up the interest and support of club members in a great measure.

Jumping ahead a bit, by 1952 the club had grown to a healthy one with a membership of 94 which included amateurs from Hampden and Hampshire counties and Connecticut in ages ranging from high school students to retired oldsters, and in June of that year we sponsored the ARRL New England Division Convention and Hamfest in the Industrial Arts Building on the Exposition grounds with an attendance of approximately 2500 hams from all parts of New England, New York, New Jersey, and Pennsylvania. All the club members cooperated enthusiastically, playing big parts and small, in making it a most successful project.

There is a close connection between the activities of club members and the interest and enthusiasm they impart to other members. I don't expect that I have made a complete listing of club members who have been outstanding in various phases of amateur activity, and if you have been omitted from the list as this history unfolds, please con't feel the omission was intentional. It wasn't!

Our early Zero Beat editor, Rog Corey, now transferred to Westwood, was always interested in contests and DX. He's still at it and was named top dog in the January QST for winning the July CD party contest.

 $\,$   $\,$  Bill Rosner, ex-W1RFU, broke world records for DX on the VHF bands in the middle 1950's.

Dick Stevens, WIQWJ, radio instructor, expert on micro-wave transmission, and experimenter in the UHF field, has given us information, inspiration, and entertainment, frequently aided and abetted by his side kick, Pete Pederson, WIRVW.

Hal Atwater, WIVNH, by his devotion to 2 and 6 meter activities, could always be counted on to run up an impressive score when we battled the Hartford Club in VHF contests, and he is still at it and reaching into UHF fields.

So many of our members have added to the success and good fellowship of the club, that all can take credit and take pride in its progress. A whole evening could be used up listing the public services where our members have been active. Wl's - MNG, BVR, FAB, VBG, DGJ, and many others are constantly linking service men with their home foks.

Our TVI Committee has been of immeasurable value in improving the ham radio image in the eyes of the public. When people began to learn that heating pads, hearing aids, neon signs, diathermy machines, and fluorescent lights could louse up a TV program just as nicely as any overdriven ham transmitter, some of them began to realize that the amateur might not be quite as big a devil as he had been pictured.

The years 1948 to the present have been marked by an interesting, ever growing club with members playing a significant part in communications during hurricanes and floods, conducting code practice and technical sessions, participating in field day and whf contest activities, civilian defense drills, all women's transcontinental air races, MARS operation, and testing and perfecting ham gear.

A summation of club history wouldn't be complete without paying tribute to two recent "Silent Keys". Carl Morris, WIVBG was honored last October 27 with a special citation in braille from the Air Force for his constant service as a civilian operator working in their behalf. Frank Cushing, WIAWW, went back to the very earliest days of ham radio. He founded the company that for many years was one sure place where a ham could get the part he wanted when home brew gear was the rule instead of the exception. He was an interested member of the club until failing health curbed many of his activities.

Perhaps it is a sign of age or maybe experience, when one makes observations or suggestions, but I'm going to take a chance and hope that these closing remarks won't be amiss.

This club has had a relatively long life so far as radio clubs or associations are concerned. It's future depends on the interest and support of all the membership. The Board of Directors has a great responsibility to see that all matters pertaining to policy, procedure, and programming are carefully considered and decided upon in their monthly meetings and then made known to the membership. Many clubs have been weakened, even disbanded, by trying to conduct business from the floor when the club had gathered for an evening of entertainment and good fellowship. I believe our method of handling club affairs has stood the test, and should not be changed or compromised.

Perhaps the greatest responsibility for successfully perpetuating a club rests on the shoulders of the nominating committee. Under our procedure, nomination is usually tantamount to election, and so a nominee should have more than a passing interest in the hobby, should be familiar with the fundamentals of good amateur practice, tradition, and procedure, and should not favor a course that would be a radical departure from the policies that brought this club successfully through the past.



### Dues Dues Dues...

We can't send out 'reminders' that your membership has run out, a red dot on your address label means it has expired.

If the label reads "Jan 79".

your membership expired January first, not the 31st! Mail the \$5.00 to Steve Shore, WALZEV, 20 Valley View Dr., Bloomfield, Connecticut 06002

# Hampden County Radio Club Roster

WILLIAM WERENSKI, President	MICIK
WILLIAM ROSNER, Vice President	WIRFU
WALTER C. ROSS, Treasurer	WIQUQ
DAVID W. LLOYD, Secretary	WIPHU
DAVID W. LLOTD, Secretary	WIFNU
	Wls .
Thurston Ackerman	SHX
Robert A. Adolphson	NLE
Mark Andrews	RQA
Nick Andrews	PDF
Harold C. Atwater	YNH
Henry Baier	NY
Walter Bathgate	CR
Thomas F. Barrett	KUE
Warren T. Barrett	PFR
Robert Bass	LEH
'Sam Bennett	OJK
William G. Blankenship	RDR
Clarence Bordeau	IJT
Myles Brennan	MOK
Donald H. Briere	svw
Fred Brigham	ETY
Larry Burrow	UBD
Lucy Cafaro	*
Tom Cassidy	PKI
Ernest Champagne	MSN
Tom Chapman	KK
Myles B. Chatfield	TCM
Ronald Child	*
Howard L. Converse	IOF
Roger E. Corey	JYH
Isaiah Creaser	UD
Howard Cutting	JWY
Raymond Dauphinais	ΓΊΦ
Raymond J. Dauphinais	*.
William Dean	AT
Georgo De Verry	UMF
C. Dewey, III	RZG
Thomas Ferguson	
Jim Finnerty	LDE
Edward Foster	TTL
Gordon Frost	MAK
Eunice Gordon	UKR
Robert Gordon	KUŁ
Delfo F. Govoni	
Bill Goyette	TFP
Ken Gurney	SIT
Bert Gowell	ESA
Alfred Haberman William Ham	TDO
	RRX
Kenneth Hanna	TSF

	W 13
Walter Hordman	IMF
Ken Hardy	WXd
Russell Hobbie	RHU
Dauglas Holman	SIB
Les Horner	GZL
Albert Jackson	OBQ
Henry Jette	EGN
Austin Johnson, Jr.	SFU
Donald Johnson	UPH
James Kallipolites	•
James W. King	EVZ
Melvin Kinsman	OJA
William Kirby	BCI
John Kopaczek	ĢFS
James Kozak	SDZ
Ambroise Lamoureaux	*
Roland LeFebvre	LWS
Robert Lieson	KFV
Albert Lyons	BOT
Christos Manitsas	IJL
Hugh McLone	<b>QCT</b>
Osborne R. McKeraghan	HRV
Malcolm Merchant	MQK
Carl Morris	<b>V</b> BG
Richard Napolitan	SXJ
George Nixon	TIX
Percy Noble	BVR
Victor Pagunoff	EOB
Rollin Pedersen	RVW
Victor Peterson	*
Joseph Piekarski	PIR
W. C. Query	RAD
Louis Richmond	<b>AAK</b>
Ralph Robinson	ICM
Robert Sabin	UAN
Donald Shaw	OFZ
Percy Spence	TAY
Michael Stevens	*
R. B. Stevens	φwı
Ernest Stoddard	BH
David Stone	*
David Strachan	ODE
Henry Tadgell	AGM
Harry Tanzer	₽GĢ
Edward Theroex	RTV
Waiter Walczak	RDC
Walter R. Walczak	RDC
John Weighell	Йιό
Theodore Witowski	RLY
Arthur Zavarella	MNG
* Associate Members	

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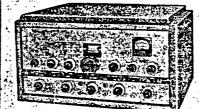
HAMPDEN COUNTY RADIO CLUB

These pages were taken from the program issued at the 1952 convention. Many of the club members listed are still very active in the Association. Wonder where everyone else is? If you'll drop a note to Zero Beat, we'll let everyone know the news.

The accumulation of club history and artifacts is still going on. Any old pictures that you might have will be greatly appreciated. K1KBO gave us a nice picture of Stan Call et al, from about 1955. Who else will treasure this kind of junk?

Send or give your goodies to Jeff Duquette, KlBE. Mail it care off Zero Beat, P.O. Box 346, Southwick, Mass 01077

## The Overbrook Co. Proudly Features



JOHNSON VIKING 1 Transmitter Kit (amateur net) only \$209.50

150 Watts input on all bends. Band switchng 160 thru 10 meters. AM phone or CW. Continuous tuning final tank. Front panel controls. Unique Pierce oscillator, YFO input receptacle. 10 crystal positions. Pinetwork coupling. Freedom from peresitics. Two complete power supplies. All stages metered. Desk cabinet 11 3/16" x 15" x 21".

KIT OF Tubes . . .

We can supply a complete kit of tubes including the Raytheon 4032 for the sum of \$36.50. We can wire the unit for you for the sum of \$30 additional. Other accessories are the new TVI #250-21 Kit similar to that recommended by Phil Rand in the June 1952 Q.S.T. and the price is \$24.75. Also available is the new Johnson Low Pass Filter 250-20 which works into a 50 ohm load and will readily pass IKW (amateur net) — \$16.50.

### Hams Learn It's Possible to Receive Extra Kick in Legal 'Home Brewing'

"Home brewing" was the topic of William J. Hall of Wilbraham Friday at a meeting of the Hampden County Radio Association, in Feeding Hills Congregational Church.

In 1934, the federal govern-

"The government was forced to do something, be-cause the amateurs were in-

terfering with government transmissions. The act estab-

lished certain wave lengths

that could be used by ama-teurs," Hall said,

The topic referred to building picked up by a receiver, he "In the early 1960s, a ham radio equipment, and not mak-said.
ing moonshine and was intend- "From these early experied to show that a person can ments, the whole concept of enjoy building radio equipment messages sent in code began."

tions act.

Hall, a Monsanto Co. engineer, has written several articles on building amateur radio

It's very easy for a person to buy all the equipment he needs to be a ham today, but this takes half the fun out of it. I have found that it is

personally gratifying to build my own equipment," he said. Ham radio began in the days Ham radio operators have alof Marconi, when persons were ways been interested in devel-

interested in experimenting in oping new and better means of the new field of communication, communications

It said.
"They helped to develop the "In those days, one couldn't art of radio communications." any of the equipment and did a great deal of the ear- Today and Sunday, the Hamp-

would only reach across town loft the moon and received back quency contest. The Hampder and were not actual voices, but on earth was accomplished by County club has won the contest merely sounds which could be an amateur, Hall said.

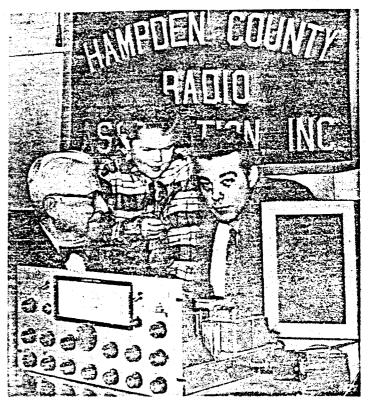
radio operator bounced a siznal from Boston, off the moon, and was received in California.

"Recently, an amateur a signal from the east coast to Australia, via the moon, a distance of over 11,000 miles, the longest radio signal ever sent

Even with the sophisticated means of communication available today, amateurs are still interested in experimen-

"Many amateurs are working with ultra-high-frequency transmissions. They are do ing this, even though there is no real value to this, but just because they enjoy it," Hall said.

Crystal and spark transmitters by experiments in trans-Atlantic den County Radio Association were all made by amateurs." communications, he said. will compete with the Hartford These early transmissions. The first radio signal bounced Radio Club in a very high trethe past two years.



Members of Hampden County Radio Association look over some of the newest equipment for amateur radio operators in Feeding Hills Congregational Church, Feeding Hills, Friday. Left to right are: Bert W. Gowell of Wilbrahan, Harold F. Potts of Feeding Hills, and William J. Hall of Wilbraham, guest speaker.

## Springfield Had Key Roles in Early Days Of Radio Relay League, at 50-Year Mark

One Sunday morning in the early spring of 1923, In the midst of the league's a young Springfield man loaded various radio equiphistorical potpourri, Springfield ment into his Model T Ford, ventured into the wilds of Hampden, got stuck in the mud, but arrived in time at the Baptist Sanctuary to set up the first sermon broadcast in Western Massachusetts.

Golden Jubilee

The young man was Howard Gurney, a member of the American Radio Relay League which was then in its youth and this year celebrates its 50th anniver-

Gurney had actually proceeded from South Congregational Church where he had installed broadcasting equipment. The late Rev. James G. Gilkey was to preach from South Church.

The listening congregation was really members of the Hampden Community Church, Gurney recalled. church burned down in January of that year and they were holding services at Bantist Sanctuary which is now called the Federated Church of Hampden."

a broadcast from South Church over). rather than have a guest min-ister come in or have no service 6000 members, 4000 of whom at all. I was willing to gamble served in vital communications rather than have a guest minif he was.

It worked well. In fact, the project was cited in a picture article, April 17 1923 project was cited in a picture article, April 17, 1924, by the Mid-week Pictorial (N. Y.) as one of the "recent developments" project was destined to make significant history. By one of the "recent developments" project was cited in a picture Messages to Europe article, April 17, 1924, by the make significant history. By one of the "recent developments" project was cited in a picture article was given by the messages to Europe article, April 17, 1924, by the me in radio, wonder science of the century."

In the pictures, rapt expressions of churchgoers formed a peculiar contrast to the impersonal presence of the apparatus before them. Gurney had placed a thorola speaker in the pulpit with a loop antenna and receiver on a table in front. To complete this Orwellian scene, Gurney remembered the deacons taking the offering as if the music were in the church.

Though perhaps no less unusual than the drama of Gur ney's precedent, was the birth of the ARRL itself. Springfield thousand in stress situations, and another Springfield man Many will remember New Engwere instrumental in starting the

According to a January, 1964 issue of QST, the league's national magazine, Hiram Percy Maxim, famed inventor and industrialist, tried to reach a local operator named Freeman K. Ostrander. Maxim wanted to buy a de Forest audion tube, a precious item in those days, and he knew Ostrander had one.

Contact Impossible

Maxim had a one-kilowattt station with an ultimate sending range of 100 miles, but for some reason, which even exists today, transmission conditions prevented oirect ground-wave between the two cities.

Maxim was undaunted. Using continental code of the day, he called a youth in Windsor Locks, a member of the Radio Club of Hartford, who relayed the message. The die was cast.

Maxim knew an organization devoted to relaying messages among amateurs across the country would give intelligent perspective to an otherwise diffuse group of experimenters.

The idea paid off. By the middle of May, 1914, the ARRL was in business. In December, Their minister, Rev. Hubert was in business. In December, Fulton, was out of town, Gurne, 1915, QST was founded. (QST is continued. "He asked me at the last minute if I could arrange among operators the world

posts during the war. The times

type transmitters and broad-casting voice and gramophone records. On December 7, 1921, American amateurs' signals were received in Europe, and on Nov. 27, 1923, voice contact was established between France and Connecticut.

During the 20's, the first police radio systems were based on amateur radio procedures. The Army and Navy organized radio reserves

composed almost entirely of amateurs.

In the 30's, the league had enough knowledgeable amateurs who were able to handle disaster relief messages by the land's flood in 1938. League members were constantly available for service.

At the start of World War II. 50,000 of whom participated in 22-25. communications work during the long struggle.

formative years. Local mem-

bers of the league, like Gurney and Ostrander, often par-ticipated as a group. Their emphasis always underscored the league's philosophy: relaying messages,

On July 2, 1921, the Springfield Radio Association, which was formed in 1919 by the late Isaiah Creaser, broadcast the first heavyweight cham-

pionship fight from its head-

quarters in Orleans St.

Club member Cyril Sias, still actively operating, remembered that the reception was good and the fight was in Jersey City, N. J. Others without radios called for the results of each round until Dempsey disposed of Carpentier in the fourth round.

The league commended the local club and gave all participants a certificate praising their ef-

Not much later, the SRA took part in a home show at the Municipal Auditorium from Oct. 27 to Nov. 1, 1924. Their booth was the center of great interest among amateurs and listeners.

Short Notice Project More drama surrounded the construction of their transmitter. Built on short notice, it was a 10watt unit hurriedly constructed by Creaser, T. F. Cushing and the late Ralph Gross.

QST lauded the project with special praise for the use of vacuum tubes which emitted a "continuous" wave broadcast. Most transmitters then used a spark system that had a "damped" wave broadcast and was notoriously scratchy.

Of particular note was the antenna that olub members had constructed on the Campanile Tower. It had a height of 45 feet with a 50-foot counterpoise, especially helpful in reaching remote spots like Tuscaloosa, Ala., 1000 miles away.

The SRA sent a total of 133 radiograms that week, all in Morse code. The set was in operation from 1 to 11 p. m. each day and stopped only to change operators.

By 1931, the SRA had 25 members. In 1931, 13 of the club's members were licensed operators and were responsible for the At the start of World War II, success of the "air annada ma-60,000 amateurs stood by, some neuvers" at Bowles Field May

It was an honorable gesture on the part of the Army that realized the indispensable value of radio. As part of the Army's air maneuvers program, the SRA outfit acted as the official communications service for this area. The amtival and departure of every plane was transmitted: to ARRL headquarters in Hartford. Weather conditions, direction and velocity of wind were checked every half hour and relayed to other contact points in New England.

These were some of the SRA's more illustrious moments in the early days. Things have changed of course. Because of reported business conflicts, the SRA gradually died, but on Sept. 17, 1954, with interest rekindled and a new system of transacting alfairs, the Hampden County Radio Association, Inc., was formed Today it boasts 175

members.

Average Amateur

ARRL membership today exceeds 100,000 with stations in Canada, Europe, Africa and South America.

It is said the average American amateur has invested \$1000 in his station and spends another \$200 a year for improvements. He is about 37, close to the average age of America's population, has spent some time in college and makes more than the average income.

While not completely accurate, new members should realize that the HCRA has been around since radio's early days. Some of our founding members are still active.

Reprinted from "Springfield Union, 1964"

ZERO BEAT JAN '79

# ARRL Sweepstakes HAMPDEN COUNTY RADIO ASSOCIATION

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ARRL Sweepstakes

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