

SPARC GAP

ST. PETERSBURG AMATEUR RADIO CLUB

CLUB CALL W4GAC
REPEATER CALL WR4ALM
(147.66 IN) (147.06 OUT)

CLUB MEETING ON THE FIRST FRIDAY
REPEATER MEETING ON THE THIRD FRIDAY OF EACH MONTH

P.O. BOX 4026
ST. PETERSBURG, FLORIDA
33731

OCTOBER 1978.



PRESIDENT C.E.(REX) Cottrell W4GPL
800 Bay Point Dr. Madeira Beach 33708
Phone 391-5158

EDITOR-PUBLISHER Jack Adams W4NOK
1851 66th Ave N. ST.Petersburg 33702
Phone 525-2448

S P A R C G A P

"Serving St. Petersburg Since 1934"

FRIENDLY SERVICE
QUALITY MERCHANDISE

QUALITY PRODUCTS SELECTED TO SERVE YOUR NEEDS

- AMATEUR, EXPERIMENTERS OR HOBBIEST -- ALSO
TAPE RECORDERS AND HIGH FIDELITY COMPACTS AND
COMPONENTS.

Cooper Radio Co. NOT INC. **ELECTRONIC PARTS**
Distributor

Ph. 894-7607 165 - 13 Street North — P. O. Box 10010 — St. Petersburg, Fla. 33733

OUR NEXT MEETING WILL BE ON OCTOBER 6, 1978 AT THE RED CROSS
HEADQUARTERS 818 - 4th Street No., St. Petersburg, FL

Bill Schoppe WB4DNA will speak on the subject "Ham Transmitter Hazards to Pacemakers... True or False?"

=====

The meeting of September 1, 1978 was called to order by Rex Cottrell W4GPL at 8:04 P.M. Fifty two members and guests were introduced and welcomed.

The minutes of the last meeting were read and approved, and the Treasurer's report was read and approved.

Betty Bellows WA4TJG told about the planned dinner to be held on October 28, 1978 at 6:30 p.m. at Chef Lazar's Continental Restaurant, 1700 Park Street North, St. Petersburg.

Woody Huddleston K4SCL thanked everyone who voted for him during the recent S.C.M. election. He also reported that George Hart W1AGM is retiring, and Ellen White W1YL of the A.R.R.L. was making up a brochure to give to him as a memento. She would appreciate hearing from anyone who has something complimentary to add to her brochure.

Woody also reported that he and the other members of the Engineering Committee have met with some difficulty in getting the auto patch working. He hopes to have it working soon, however. He requested a meeting of the Engineering Committee immediately after this meeting.

Rex reported that he will purchase a dummy load from Heathkit for the station at Red Cross Headquarters. It will cost \$17.75.

The Red Cross has requested that we man W4GAC during emergencies. Bob Smith WB4OIG, Paul Smith K4JRN, Howard Clark WA4KER and Al Raines N4NL will cover the station during a 24 hour period, but additional operators will be needed.

Hank Huth WA4WKO gave the Publicity Report. He has requested autobiographies from the members to print in future issues of SPARC GAP.

Jim Hughes K4WYN gave the Net Report. He has requested help for a period of 60 days until he can get his new home finished and settled.

The Melbourne Hamfest will be held September 9 & 10, 1978. There was a discussion about having a hidden transmitter hunt during the upcoming Clearwater Hamfest.

Woody reported that the Metro Repeater 93/37 does not have an emergency net. He hopes someone will volunteer from that club and start an emergency net soon.

A letter had been received from Bill and Betty Cox. Their new address is: 504 Silverthorn Road, Gulf Breeze, FL 32561. Tel. no. 904/932-6837.

The meeting was recessed at 8:33 p.m. for coffee and doughnuts, and was called back to order at 9:00 p.m.

The program for the evening was presented by John Komp WB4YTY on Red Cross Emergency Procedures. He stated that the Red Cross is a month or more behind in their preparations. He said that emergency procedures go into effect when a hurricane is 300 miles from Pinellas County. There are 19 shelters in the South end of Pinellas County alone; 10,000 people will need shelter along the Beaches alone with 3,600 people living in mobile homes in Pinellas park and an additional 10,000 to 12,000 people in the city of St. Petersburg who will need emergency shelter. It is a big job, and it is done by volunteers. There is only one paid member on the staff. John said that a "dry-run" will be held using Amateurs on 2 meters in the near future. He requested volunteers to assist in this tremendous undertaking.

The meeting adjourned at 9:31 p.m.

Respectfully submitted,
Faith Lakeman WA4WOU

S P A R C = G A P



woodrow (Woody) Huddleston - K4SCL

Woody was born in Mississippi and raised in Illinois. After graduating from High School he then enlisted in the U.S. Navy, and starting his career with the Navy in Communications and electronics. After becoming Chief Radioman he then was selected to attend flight training and became a Navy Pilot for about 24 years. Saw duty in many parts of the world and in the United States.

Along with his regular duties in the U.S. Navy he attended University of Hawaii - University of Southern California - George Washington University in Washington, along with a multitude of correspondence courses.

In 1966 Woody retired from the Navy having served 30 years with the rank of Commander. Upon retirement he moved to Florida with his family, and he and his son Jim piloted his 27 foot cabin cruiser from Virginia down the Potomac River and on to the InterCoastal Waterways to Florida and to the back yard at Driftwood Lane, Largo, Florida.

It was a great adventure and experience for a Father and Son activity. Woody has been in ham radio since the age of 14 and over the years has belonged to many Radio Clubs from coast to coast and Hawaii, has performed many services and has handled many messages along the way. About two years ago Woody joined the St Petersburg Amateur Radio Club becoming interested in forming the 2 meter Repeater Club and is the Trustee and Technical advisor for the repeater club.

He is also Section Communication Manager for ARRL and very active in the handling of traffic for the Florida Sidebanders - QFN nets on to 4th region plus running the repeater net everynight, also busy with improvements of the repeater WR4ALM while at home.

At present he is employed by the City of St. Petersburg, at the communication repair center. He is married to Fran Huddleston - K4RXO- who also does a little amateur Radio, is father of 5 children, 4 girls and 1 boy and at present 3 lovely grand children.

He has participated in many public service projects handled by the SPARC REPEATER TEAM. Since in Florida he has been very active in the Clearwater Power Squadron having completed all of their courses and also teaching a Jr. navigation class for the last few years, he has also been active with the Clearwater Windjammers Club having served with the committee boat in the Gulf Races.....

de K4RXO

To the above excellent autobiography, by his good YF-Fran, wish to add the following: Hearty congratulations to Woody on his re-election as ARRL Section Communication Manager, for the third time (2-year terms), with a landslide vote of better than 2 to 1.

Woody is still going strong, as he is ARRL Assistant Director; Manager of the Emergency Net, as well as Emergency Coordinator. He meets 5 or 6 different Nets a week & active in all Public Service activities, of which they are too numerous to mention.

It is hard to understand how he manages to all he does & is not even retired. Amateur Radio needs more "Woody Huddlestons", the leading commodity in the radio field.

FENDER BENDER

AUTO SHOPS, INC.

- **Painting**
- **Body Work**
- **Frame Repair**
- **Tune-Ups**
- **Brakes**
- **Carburetors**
- **Air Conditioning**

**TELEPHONE
(813) 384-4321**

WA4VRP
Lou Ryan

WD4EFM
Tom Cobb



**3237 Tyrone Boulevard
St. Petersburg, Florida 33710**

COMPLIMENTS OF
W4TAD



WHATS UP DOC?

W.C.(BILL)HAZELL

BOX3468

SEMINOLE,FLA. 33542

THE CLASS OF '78

by: Faith Lakeman WA4WOU

We were all strangers that first night at the Amateur Radio Session at Oak Hill Academy, Mouth of Wilson, Virginia, but our strangeness didn't last long. Our common interest in Amateur Radio, and the natural friendliness of "hams" united us into a working team. Introductions quickly turned into conversations of upgrading, code speeds, theory and the latest F.C.C. rules and regulations.

The morning of our first day of classes dawned with Carl Peters K4DNJ, Executive Director of the Radio Session, sending "CQ" on the alarm bell at 7:00 a.m. A breakfast of bacon, eggs, grits, toast and dry cereal was served at 8:00 a.m. and code class started at 8:45 a.m. Thirty minutes of code, followed by an hour of theory; another thirty minutes of code, followed by an hour of theory, and another thirty minutes of code sent us scurrying up the hill to the cafeteria for a hot lunch and an afternoon of R & R. Supper was served at 6:00 p.m. and classes resumed at 6:45 p.m. with thirty minutes of code and ended with another hour of theory. Our evenings were spent in the lobby of the dorm singing, swapping the latest jokes, and getting to know each other.

Each day started with Carl Peters sending strange things on the bell (CQ, KP, ???) were all part of his repertoire. Breakfasts, lunches, and suppers varied from great to super, but one thing that never changed, and that was our class schedule. After all, we were there to upgrade our licenses, right?

One day blended into another; our friendships grew, our code speed increased, and suddenly we had only two days left. We started packing; some even slipped away without a "good-bye". Emotions were running high and it's hard to say "so long" with a lump in the throat. A group of "hopeful's" went to Norfolk to take the F.C.C. test on their way home. The dorm became strangely quiet.

Suddenly the telephone rang, and a cry of pleasure echoed down the empty halls from Mr. Peters office. "Herb is a GENERAL", "Don made EXTRA", and on and on, as each one called back with the results of his or her test.

I'm back home now, still gathering up courage to go over to Tampa to take my own test, but my thoughts are still back on top of that mountain in Virginia. I remember the night Robert Isner, President of Oak Hill Academy surprised us with four (yep, FOUR) flavors of homemade ice cream; and the night he cut the ice cold watermelons and served the slices off the back of a truck. I remember the afternoon his wife, Linda Isner, took a group of us to an antique show and craft festival in Abingdon, Virginia. I remember the music from the Fiddler's Convention and the night of square dancing in Galax. But most of all, I remember, and remember, and remember.....

S P A R C - G A P

The Prez Sez:

Now that Labor Day is past and school started again, things should settle down to "I hope" a quiet and enjoyable Fall Season for us all.

With two or more storms out in the Atlantic, most of us are more than ever sensitive to the thought; "This time, one of them may find the St.Pete area."

The Red Cross Preparedness Program as presented by Mr John Comp, W4YTY, at our last meeting was quite informative. As you know, the Red Cross depends upon trained volunteers for the major part of their operations. In the South Pinellas County Area the SPARC & Repeter Team groups are key communications groups. Woody Huddleston, K4SCL, as ARRL Emerg.Comm.Cordinator is also closely associated with those Hams in the area that aren't directly connected with SPARC. These basic groups furnish the basic volunteer pool for our Emergency Communication Systems for the area. From you folks we hope to have sufficient volunteers to cover the comm.centers at: Sheriff's office, Police(St.Pete.), W4GAC and many other locations. Actual requirements more-or-less depending upon the type of emergency.

Living in this area does impose certain stringent requirements, ie: a planned for high water and/or winds, sufficient food and good water and transportation. Consideration to a family meeting place in the event of a sudden emergency. Don't forget the Hi Point toronado and it's problems of getting children and their families together, this could be embellished by, Dad at work and Mom out shopping. Lets have a planned program to tentatively consider every facet of such a situation, that we can imagine.

Please don't forget: October 6th SPARC meeting, October 20th Repeter team meeting and October 28th the supper at Ch.Lazar's.

very 73,

Ref
W4GPL

On August 18,19 &20th, the Exchange Club of N.E.StPetersburg, sponcered the APBA-78 INTERNATIONAL INBOARD BOAT RACES at Lake Maggiore. K4NCB, Ned and his wife WA4EDL,Nancy; have long coordinated the Amateur radio participation in these events, with very outstanding success.

The following Amateurs, 10 of them from SPARC; and Ned were able to accomplish an outstanding performance. The difficulty of voice communication during the races of the larger more powerful boat races can present quite a rough hearing problem too. Those Hams envolved for all or parts of the three days of the races were: W4APV, W4CF, K4CNB,WD4COL,WB4DWU, WA4EDL,W4EGM,W4NL, W4GPL,K4IGO,K5IHH,K4KXC,K4NAN & WB4PNV. They acted like the professionals they have become and a very creditable job was done.

While a rain storm gave some relief from the heat on the 19th. most of the time the thermometer stayed close to 90 deg. and a clear sky. A large amount of Sun Tan Lotion was used, but still a lot of red skin was showing.

As you know the proceeds of this activity all goes to equipment for ALL CHILDRENS HOSPITAL and we were all happy to be a part of the program,

W4GPL

SPARC-GAP

W4OJH

PHONE 392-5810

DONALD SUMMERS

AMWAY HOME CARE PRODUCTS.

AFTER YOU HAVE TRIED THE REST, LET ME SHOW YOU THE BEST.

DEALERSHIPS AVAILABLE

10398 104TH AVE. SEMINOLE, FLA. 33543

HAVE YOU WORKED ALL

HANK'S

WA4MSY

WA4RLV

"73s"

WA4WKO

WA4FNK



OAK HILL ACADEMY

AMATEUR RADIO SESSION

MOUTH OF WILSON, VIRGINIA 24363 • SUMMER ADDRESS
BOX 1461 NORTH MYRTLE BEACH, S.C. 29582 • WINTER ADDRESS



G E N E R A L T O E X T R A . C L A S S

A VACATION WITH A PURPOSE - STUDY ON A MOUNTAIN TOP
OUR 20th YEAR - GRADUATES FROM 42 STATES AND MANY FOREIGN COUNTRIES

all ages welcome - YL's and OM's

WRITE NOW FOR A BROCHURE

Classes begin JULY 28 thru AUG. 10, 1979

THIS SPACE FOR RENT--

\$ 7.50 per year.

THIS SPACE FOR RENT--

\$ 7.50 per year.

SPARC-GAP



ADMIRAL
SALES
BOB KASTLE K4TQW- LIMITED AMATEUR WORK
CALL FOR INFORMATION.
KASTLE TV
TRADE IN YOUR OLD TV (OR LET US
FIX IT TO WORK LIKE NEW)
SERVING ST. PETERSBURG AREA- 24 YEARS SAME LOCATION
3898 - 46TH AVE., NO. ST. PETERSBURG, FLA.

PHONE 526-7744
HOURS 8:30- 5:00 PM
DAILY
SAT. -9:00 to 12:00



COMPLIMENTS
OF
**BOB
K5IHH**
THE
"IRON HULA HOOP"



SPARC-GAP

WE REBUILD, RADIO, HI FI, AND TV LOUDSPEAKERS

Quality

SPEAKER RECONING SERVICE

WILMER CHAPIN W4MCA
1679 27th AVE. NORTH.

PHONE 895-3401
ST. PETERSBURG, FLA. 33713

LAND LINE (813) 577-5060

**ALEXANDER
ELECTRONICS, INC.**

TWO-WAY RADIO SALES & SERVICE
8131 U.S. Hwy. 19
N. Pinellas Park, Fla. 33565

Business Band Citizens Band Amateur

Sam WB4HXQ

Telephone 822-3293
APPOINTMENT NECESSARY

Linda Lee's
BEAUTY SHOP

HELEN BRACE
Owner

442 Second Street N.
St. Petersburg, Florida



HAVE A HAPPY
HAM DAY

WD4COL

(813) 585-7364

JOHN MacDONALD

TENNIS PROFESSIONAL — COVE CAY GOLF & TENNIS CLUB

lessons by appointment

UNITED STATES PROFESSIONAL TENNIS ASSOCIATION
YAMAHA TENNIS PROFESSIONAL STAFF

SPARC-GAP

MID AMERICA'S FASTEST GROWING HAM RADIO CENTER

AMATEUR RADIO

SELL - TRADE - BUY

DISTRIBUTORS FOR --

KENWOOD - SWAN - TEMPO - HY-GAIN - CDE - COLLINS
R.L. DRAKE - CLEGG - GALAXY - TEN TEC - REGENCY
MOSLEY - NEWTRONICS - HALLICRAFTERS - TRI-EX - ROHN

ASK ABOUT OUR CREDIT PLANS = MASTER CHARGE & REVOLVING

Associated Radio Communications

8012 Conser P.O. BOX 4327
Overland Park, Kansas 66204

AREA-913

Phone: DU. 1-5900

*If we meet and you forget
me, you have lost nothing;
but if you meet JESUS
CHRIST and forget Him
you have lost everything.*



COMPLIMENTS OF
WA4QGY BUD
AND
WB4UFO LYNNE
SARASOTA, FLORIDA



K4KXC
mobile

Radio Mr. Ed Leddy
EDMUND LEDDY, JR.
984 SOUSA DRIVE
LARGO FL 33540
(813) 536-4158
73 OM
1951 OM TV 1954 AS

SPARC REPEATER NEWS

Considerable work has been done in trying to get our old autopatch board working, but it is still defunct. We found, much to our surprise, that we were not on a touch-tone telephone line. This situation has been corrected, but we are still not able to get sufficient audio through the patch either to modulate the transmitter or to be heard on the phone line.

The engineering committee has had a meeting to try to determine what to do next. Consensus is that we should buy commercially built equipment. Data Signals and Spectrum Communications equipment are being considered. There are problems of interfacing either equipment with our Progress Line repeater. We have been saving money about 4 years towards purchase of a new solid-state, state-of-the-art, repeater to replace the Prog. Line equipment when it wears out. Perhaps now is the time to do this. We could buy a Spectrum SCR-1000 repeater, with autopatch and control system, all factory wired and tested. This would cost us a little over \$2000. This is more than our cash assets, so we would need additional funds. Some members have indicated willingness to make substantial cash donations, and availability of donations from other organizations is being investigated. It looks like we can go this way, if we are sure we want to. As pointed out by a member of our Engineering Committee, all this money doesn't buy us much. Anybody who is clever with digital electronics and putting together integrated circuit chips, with the time to do it, could build what we need at a fraction of the cost. Too bad we don't have such a person with this kind of time! Anyway, we are trying to do something to provide an autopatch and improved control system. Exactly how we should proceed is not exactly crystal clear at this moment.

73, de K4SCL

Hi Jack:

Would you please put a note in SPARC GAP to the effect that, the following have agreed to be Emergency Station Control Operators at W4GAC during Emergency Station operations:

- 1- Bob Smith WB4DIG Phone 895 4889
- 2- Paul Smith K4JRN " 896 3491
- 3- Howard Clark WA4KER 347 4702
- 4- Al Raines II N4NL. 576 2795

John Smith W4ACG and the above are the key personages to work W4GAC, John Smith, W4GAC, being in charge of station activities.

The station being available to Club Members, cleared by the above, for its operation on the Amateur bands permitted by the individual license involved.

As you know Club & Repeater Team members are urged to assist these people in an emergency any way that we can.

vy 73,

Rx

Rex Cottrell W4GPL
Pres.

HISTORY OF
ST. PETERSBURG AMATEUR RADIO CLUB

Continued

The Convention proved a great success in every

way but financially. The storm, which was widespread over the State, prevented many from attending, hence, the financial loss, due to guarantees to catering service for hamfest & banquet.

Due to the pressure of the Convention arrangements & passing of their Editor, SPARC-GAP was not published & no one was willing to assume the job. During September, the bulletin was reactivated when W4TDK-Naomi Spence & W4BAV-Cathy Seeds talked W4WPF-Marvin into acting as editor with them as ghost writers. This manner of publishing continued for four years with the girls having a lot of fun listening to comments & those trying to trap them into telling if they knew.

More sadness for SPARC in the loss of another member with the passing of WN4UJW-Sam Rambo.

The Code Class held by W4TDK turned out ten Novices, besides a number getting their license up-graded. There were other activities during the year such as the annual Xmas Party.

1956

Officers installed for the year were: President, K4BUM-Claude Leroux; Vice-President, W4UFR-Earl Hill; Secretary-Treasurer, W4ANH-Ward Curley.

This was an active year in spite of the financial set back the Club experienced on the Convention the previous year. The Club participated in the St. Petersburg-Havana Yacht Race, keeping in contact with progress of the yachts & relaying same.

SPARCYLS, the YL Auxiliary organization, continued to be active.

The hamfest was held October 14th this year at the Club House, with a covered dish supper. The usual catered hamfest was not held due to the financial loss at the Convention & with the members working on clearing the deficit.

The annual Xmas Party was held at the Club House with the usual successful result.

1957

Officers: President, W4WME-Bill Foley; Vice-President, K4BNE-Rick Rutan; Secretary-Treasurer, K4ENW-George Davidson.

Participation again in the St. Petersburg-Havana Yacht Race.

Club visited by Edison Award Cup Winner. W3CUL-Mae Burke.

SPARCYLS proud of their President, W4BIL-Fran, who had her picture & interesting article in March 6th Evening Independent, naming her "Woman of the Week". Fran is a nurse.

SPARC was represented at the National ARRL & YLRL Convention, at Chicago, by W4WPF-Marvin & XYL-Lois, W4TDK-Naomi & W4BAV-Cathy. Lois became member of SWOOP (Suffering Wives of Operators Protectorate).

SPARC-GAP Editors revealed their identity: W4TDK-Naomi, W4WPF-Marvin & W4BAV-Cathy.

W1BDI-Ed Handy, of ARRL, visited SPARC in December.

1958

Officers: President, W4JOU-Bob Spiers; Vice-President, K4PLU-Bill Keesler; Secretary-Treasurer, W4WPF-Marvin Kaniss; Trustee, K4QPW-Jim Tomlinson.

SPARC-GAP took on a new look with the advent of pictures in the bulletin, the first being one of the incoming officers of the year.

The Club participated in the annual St. Petersburg-Miami Yacht Race.

SPARC lost another old timer & member with the passing of W4LAB-Tommy Thompson.

Compiled By Cathy Soehl
W4BAV

Continued Next Month

SPARC - GAP ADS.

FULL PAGE	\$ 60.00	PER YEAR
1/2 PAGE	30.00	" "
1/4 PAGE	15.00	" "
1/8 PAGE	7.50	" "

ALL ADS SET FROM YOUR MATERIAL
SUCH AS, BUSINESS CARDS, LETTER
HEADS ETC. TYPESETTING EXTRA.

THE FLORIDA WEST COASTS' ONLY FULL-SERVICE AMATEUR RADIO

SALES & SERVICE STORE OPERATED BY HAMS, FOR HAMS.....

AGL Electronics

1800-B Drew St. • Clearwater, Florida 33515 • Tel: (813) 461-HAMS

12 CHANNEL MIDLAND 13-509 220MC \$156.95

SALES NEW AND USED EQUIPMENT

SEE THE NEW ICOM 701

FULL ICOM LINE TEMPO ONE W/PS

\$440.00 CASH YAESU

NYE KEYERS, DENTRON TUNERS, AMPLIFIERS, WILSON ROTORS, ANTENNA,

WALKIES. KLM, LARSEN, TAYLOR ANTENNAS, B & W, MOSELY, ETO

MIDLAND 13-513 SYNTHESIZED 220MC RIG CASH SPECIAL \$399.95.

ALPHA, VOMAX PROCESSORS

HOURS
MONDAY-SATURDAY HOURS: 9:00 AM to 5:00PM

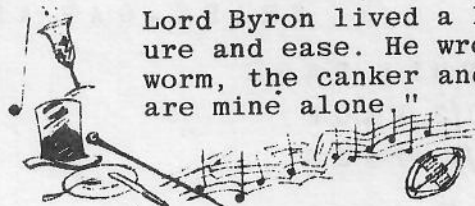


NOT IN MONEY



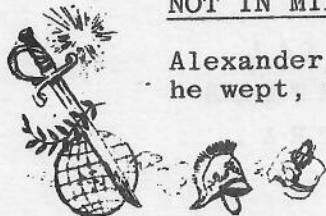
Jay Gould, the American millionaire, had an enormous fortune. When dying, he said, "I suppose I am the most miserable man on earth."

NOT IN PLEASURE



Lord Byron lived a life of pleasure and ease. He wrote: "The worm, the canker and grief are mine alone."

NOT IN MILITARY GLORY



Alexander the Great conquered the known world in his day. Then he wept, "There are no more worlds to conquer."

NOT IN POLITICAL POWER



William Tweed became the brilliant boss of Tammany Hall and ruled New York City. He said: "My life has been a failure in everything."

NOT IN UNBELIEF



Voltaire was an infidel of the most pronounced type. He wrote: "I wish I had never been born."

NOT IN POSITION AND FAME



Lord Beaconsfield enjoyed more than his share of both. He wrote: "Youth is a mistake; manhood a struggle; old age a regret."

WHERE IS HAPPINESS?

The answer is simple: In Christ alone. HE said: "Your heart shall rejoice, and your joy no man taketh from you."

"Whoso trusteth in the Lord, happy is he." (Proverbs 16:20)

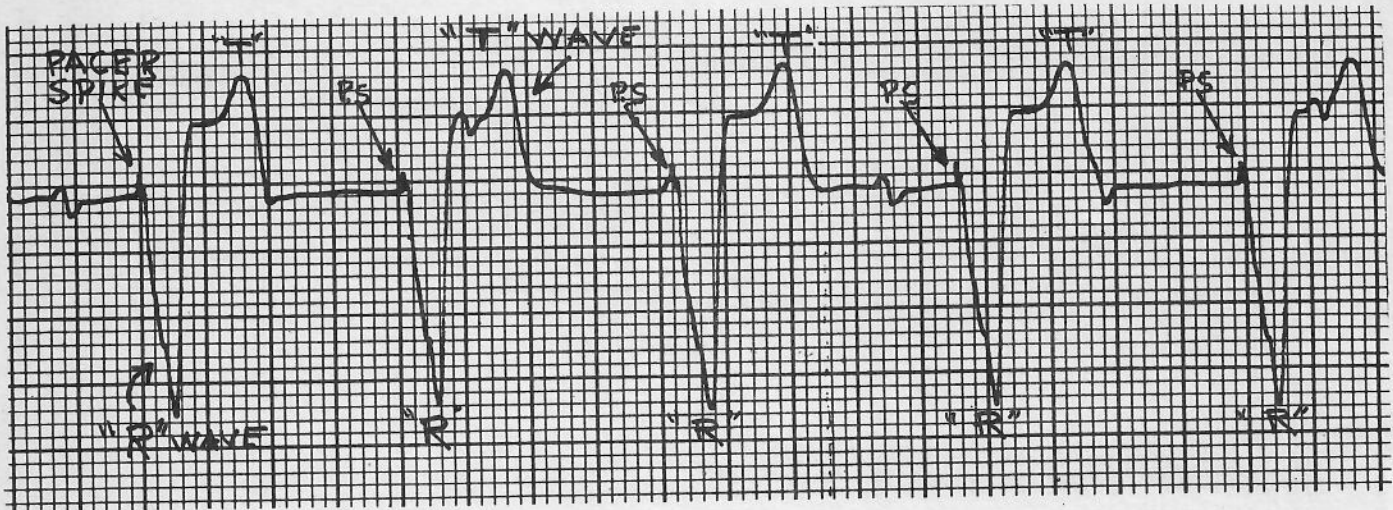
In Christ is Peace: My Peace I give unto you. (John 14:27)

In Christ is Comfort: Let not your heart be troubled. (John 14:27)

In Christ is Fellowship: I will never leave thee. (Heb. 13:5)

In Christ is Life: He that believeth on the Son hath everlasting life. (John 3:36)

PAID ADVERTISING BY CONCERNED CHRISTIANS



Ham Transmitter Hazards to Pacemakers...True or False?

QST for September, 1978 had 2 excellent articles on RF radiation hazards. They were primarily concerned with damage to tissue and internal organs. No reference was made to pacemaker hazards. Such information is usually published in medical journals, but problems do exist and have been documented. As hams we have a vital interest in what constitutes 'interference'. The chart at the top of this page is an EKG from a pacemaker controlled heart. It shows each pacemaker pulse followed by an 'R' wave, which represents contraction of the heart's two lower chambers. A brief interval later the "T" wave appears, indicating repolarization of the muscles. They are then ready for the next contraction. On the chart the arrows show the pacemaker pulse. From the onset of the pulse to a time approximately 350 milliseconds later, the pacemaker is in a refractory condition and will not respond to any electrical stimulus, whether it is a natural heart beat or an external interference impulse. The remaining time to the next pacemaker pulse (or natural heartbeat) is the vulnerable period during which any electrical signal of the proper frequency, amplitude or wave shape can be sensed by the pacemaker's circuitry. Interfering signals appearing during this time period will reset the timing circuits or cause other unwanted responses. At the next meeting we will try to explain the types of signals from our transmitters which are potentially hazardous. There are many similarities between the electrical circuitry of the human heart which can be explained the same as radio circuits. The meeting will not be a biology lesson.

Come out and learn more about this fascinating subject. We will have pacemakers on display and will attempt to inhibit (stop) a pacemaker with transmission from a hand held 2 meter transmitter. We will also report on a recent FCC action about a CB'r who allegedly created enough interference to cause a lady pacemaker wearer in Ohio to 'fall out of bed' each time the CB'r went on the air. Could this also happen to us with QRP rigs?

CUL.. Bill Schoppe WB4DWA

OFFICIAL BULLETIN NR 720 FROM ARRL HEADQUARTERS
NEWINGTON CT AUGUST 10 1978 TO ALL RADIO AMATEURS BT

The 1978-1979 ARRL Net Directory, with full information on over 600 traffic and emergency nets, is now ready for distribution. This attractive newly revised pamphlet lists nets by name, area and frequency. In addition, it tells how to check into a net, itemizes special Novice Nets, lists ARRL Numbered Radiograms, QN signals, and much more. For your free copy of this popular ARRL membership service, send an addressed envelope, at least nine by twelve inches in size, with forty one cents United States postage to ARRL Net Directory, 225 Main Street, Newington, CT 06111. AR

OFFICIAL BULLETIN NR 722 FROM ARRL HEADQUARTERS
NEWINGTON CT AUGUST 24, 1978 TO ALL RADIO AMATEURS BT

Weekly ARRL forwards thousands of QSL cards from members to nearly 150 different countries worldwide. This ARRL Membership Overseas QSL Service continues to grow thereby making it more economical for W and VE amateurs to confirm contacts with DX stations. Once a month access to this service is provided by using your QST mailing label, arranging your cards by prefix and enclosing a self addressed stamped envelope. Additional conditions of use are found in August 1978 QST. Reprints of an earlier article, outlining the correct procedures, are available without charge. Send your s.a.s.e. to Overseas QSL Service, ARRL, 225 Main Street, Newington, CT 06111. AR

OFFICIAL BULLETIN NR 717 FROM ARRL HEADQUARTERS
NEWINGTON CT JULY 20, 1978 TO ALL RADIO AMATEURS BT

Effective July 5, 1978 there is a reciprocal operating agreement in effect between Greece and the United States. U.S. amateurs anticipating travelling to Greece in the immediate future should write International Services, ARRL, Newington CT 06111 for further information. Details will appear in September 1978 QST. AR

OFFICIAL BULLETIN NR 719 FROM ARRL HEADQUARTERS
NEWINGTON CT AUGUST 3, 1978 TO ALL RADIO AMATEURS BT

Some Amateur Radio licensees who upgraded their licenses from one class to another after March 24, 1978, did not take advantage of their eligibility to change callsigns because they did not know the correct procedures for doing so. The FCC will allow these licensees to apply for a callsign change until September 1, 1978. Their eligibility will be determined by the callsign assignment system which is explained on p. 49 of May 1978 QST. Applications for call sign changes must be received by the Gettysburg, PA, office of the FCC no later than September 1, 1978, and must include a completed form 610, an interim permit showing the examination date, a copy of the upgraded license if received and a note explaining why a request for the change was not made at the time of upgrading. AR

OFFICIAL BULLETIN NR 721 FROM ARRL HEADQUARTERS
NEWINGTON CT AUGUST 17, 1978 TO ALL RADIO AMATEURS BT

Amateurs are cautioned to use FCC forms 610 dated in 1977 or later. Use of earlier forms can lead to such errors as issuance of a new call when the licensee desires to keep the current call, and so on. Forms can be obtained from any FCC office or from ARRL headquarters. In the latter case, a self addressed stamped envelope would be appreciated. BT

OFFICIAL BULLETIN NR 723 FROM ARRL HEADQUARTERS
NEWINGTON CT AUGUST 31, 1978 TO ALL RADIO AMATEURS BT

The Governments of the United States and Haiti consummated an Amateur Radio reciprocal operating agreement with an exchange of diplomatic notes on August 15, 1978. The agreement is effective that date, so amateurs of either country desiring to operate in the other can do so upon application to proper authorities. Details available for an s.a.s.e. to International Services Officer, ARRL Headquarters, Newington, CT 06111. AR

OFFICIAL BULLETIN NR 716 FROM ARRL HEADQUARTERS
NEWINGTON CT JULY 13, 1978 TO ALL RADIO AMATEURS BT

The ARRL Museum of Amateur Radio has been returned to the headquarters display area. Potential visitors to ARRL Headquarters are advised that the museum hours are from 8 a.m. to 5 p.m. Monday through Friday and that hourly tours of the headquarters complex are conducted at 9, 10 and 11 a.m. as well as 1, 2, 3 and 4 p.m. weekdays only. Visitors may operate WIAW between 1 p.m. and 4 p.m. Mondays through Fridays providing they have the original of their amateur radio license in their possession. ARRL will be closed to visitors on August 31 and September 4, 1978. AR

★ PRINTING

★ BUSINESS CARDS

★ FLYERS

★ BUSINESS FORMS

★ STATIONERY

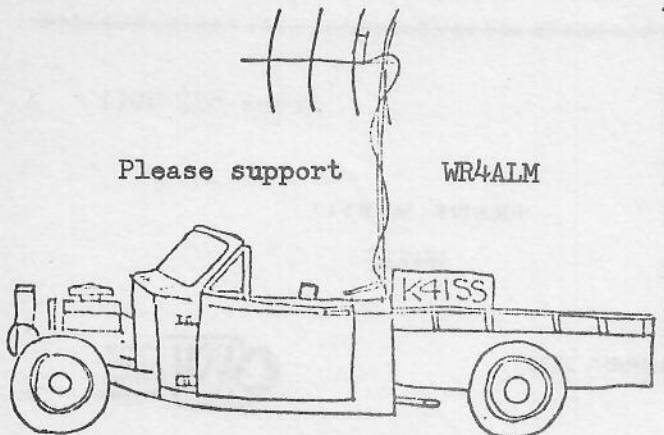
★ ENVELOPES

★ LETTERHEADS



JACKSON-ADAMS COMPANY

1851 - 66th Ave. N.
St. Petersburg, Florida 33702



**JENKINS
SUPPLY CO.**

1686 CLEARWATER LARGO RD.

MOSELY & CUSH-CRAFT ANTENNAS
ROHN TOWERS & ROTORS IN STOCK

ELECTRONIC SUPPLIES

CLOSED SATURDAY ALL DAY

CLEARWATER

584-5282



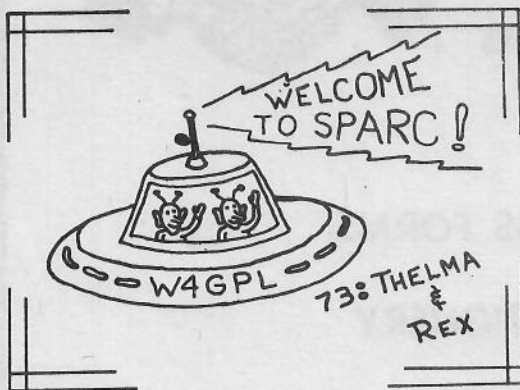
D AND C SHELL SERVICE

5801 - 34TH STREET NO.
ST. PETERSBURG, FLA. 33714

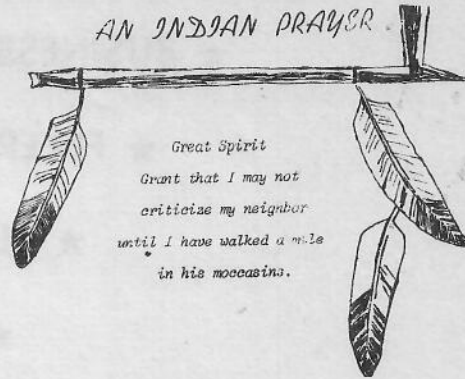
PHONE 527-5541

Dallas
WA4OST

SPARC — GAP



AN INDIAN PRAYER



Ray's Amateur Radio



1590 U.S. Highway 19 South
Clearwater, Florida 33516
(813) 535-1416



SWAN-WILSON-PACE-KDK-AMCOM-ALDA-ROHN

ALL TYPES OF ANTENNAS AND MORE.



SERVING THE RADIO AMATEUR



The Palms MEMORIAL CHAPEL

Phone 822 4011

FRANK M. RYLL

W4VIP

649 SECOND AVENUE SOUTH • ST. PETERSBURG, FLORIDA 33701



St. Petersburg Amateur Radio Club

CLUB CALL W4GAC

P. O. Box 4026

ST. PETERSBURG, FLORIDA

33731

Bulk	Rate
U.S. Postage	
Paid	
St. Petersburg, Fla.	
Permit # 49.	

TO:

Ernest E Endicott
1556 56 Ave No
St Petersburg FL 33703

RETURN POSTAGE
GUARANTEED