

PACK RATS'



CHEESE



PACK RATS

MT. AIRY VHF RADIO CLUB, INC., PHILADELPHIA, PA. (ARNS)
50 CLUB CALLS: 21.4, 492.03, 1296.3 Repeater - 122.98, 22.58 (WR3ACD)

AFFILIATED CLUB: AMERICAN RADIO RELAY LEAGUE

MEETINGS: Third Thursday of each month, 8 P.M.

MT. AIRY VHF RADIO CLUB, INC. Southampton Free Library, 947 E. Street Road
Southampton, Pa.

BITS

THE PREZ SEZ

What a welcome home ... knowing that two columns must be written before tackling the household chores and a large postal box of accumulated mail, magazines, bills, etc. We had a full 29 days of unforgettable experiences, covered close to 8,000 miles and met and made many many radio contacts and friends. The Bicentennial Year could not have been a better time. Every town is so different and each had its own displays, parades, exhibits and points of interest. Maybe at a later meeting we will expound at greater length.

When you receive this paper the special EME Expedition to Columbia, South America will be underway and full details will be in later issues.

The summer is already half over and should you want antenna work done while the weather is still good, call an antenna party together..for the September VHF QSO Party is not too far away.

Special congratulations to our A number one typist - Marsha, who is now known as Mrs. Lissauer.

Be sure to set aside Sunday, August 8th for the Pack Rat Picnic in Flourtown. Will see and meet you all then.

* * *

73, Lee, K3MXM

EDITORS NOTE: The "White Elephant Sale", the outdoor meeting at the QTH of W3ZD in Warminster on the evening of June 15, 1976, was a delightful social event. The cheery crowd made off with some goodies, lots of heavy iron and plenty of liquid refreshments. The club took in a few bucks. All were impressed with a demo of Oscar 7B as the satellite made a pass right over Zimmermans Gulch. (See article by Tony Souza, W3HMU in another part of Cheese-Bits). WA3NFV and W3HMU were the operators. The following is a list of visitors at this meeting.

Dave Gross, Delran, N.J.; Dick Levy, Phila., Pa.; Aaron Bram, Ambler, Pa. PennArc; Carl Weintz, Erdonheim, Pa. WN3ZZU, PennArc; Pat Fickett, Ardsley, Pa. KTH 2621 AbingtonReact Unit #8; Larry Fickett, Ardsley, Pa. K9X7936, Abingtonreact Captain; Lew Klunk, W3HAU; Don Biresch, WN3CDE, Ottsville, Pa.; Richard Zadrejko, Norristown, Pa.; Marie Masloy, Norristown, Pa.; Larry Souder, WA3YJB, Phila., Pa.; Mark Malmros, WB3CAE, Washington Crossing, Pa.; Shel Rabin, WA3TEP, Cornwells Heights, Pa.; Jeff Kimmel, WA3FQA, 7901 Henry Ave., Phila., Pa. Kathy Krantz.

* * *

TID BITS

WA3ZRE is ordering Pack-Rat QSO cards. 10 members ordering will save \$1.00 on their own order. Individual order cost is \$7.00 per 100.

The WR3ABE Picnic at Ft. Washington State Park in Flourtown was a grand success. It was held on July 18, 1976. You will note that it did rain on their announced rain date the previous week.

Congratulations to Dick, K3MWV and Phil WA3NUF on passing the advanced class ticket.

Earl, WA3ZRE has received an OVS appointment.

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SWAP SHOP ITEMS - no charge.

DEADLINE FOR ARTICLES IS THE GENERAL MEMBERSHIP MEETING.

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TREASURER: K3GAS, Doc Cutler

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K3IGX, Richard Boyle (2 years)
K3JJZ, Elliott Weisman (2 years)
W3HQT, William Olsen (1 year)
W3YXF, Joseph Rushton (1 year)

MONDAY NIGHT NETS:

145.2 MHZ	7:30 PM	W2EIF
50.2 MHZ	8:30 PM	W3CL
221.4/224.58 MHZ	9:00 PM	K3GAS
432.03 MHZ	9:30 PM	K3IUU
1296.3 MHZ	10:00 PM	W2EIF

NET CONTROL

FRIDAY NIGHT ATV NET:

439.25 MHZ	7:00 PM	WA3AXV
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CALENDAR OF COMING EVENTS
Syllabus by Lee, K3MXM

AUGUST

- 1 W3CCX/HK - The Pack Rats will be on 422 EME from Barranquilla, Columbia, South America to put this continent on the EME log. The special call sign will be HK1TL. Look for this call on the 20 meter link with W3KKN and W3TNP and hear first hand what is going on.
- *1 East Coast VHF Society and Trenton State College Radio Club Hamfest.
- 1 Winchester Hamfest, Berryville, Virginia. Talk-in 22/82 90/30
- 4 Lizzie Border Day, okay you ole timers, who was Lizzie Border, hugh!!!
- 8 PACK RAT PICNIC, Ft. Washington State Park, Flourtown, Pa. all day
Spend a quiet, restful day in the country with the family, kids and Radio buddies and friends. Free Soda, games, prizes, kiddie bags. A special invitation to other radio club members to join us on this day. Talk in on 52.525, 146.52 - 222.98/224.58
- 12 Board meeting, QTH Harry Brown, 3012 Potshop Rd. Norristown, Pa. 215-584- 4846
- 14 Knight Raider VHF ARC HAMFEST, East Rutherford, N.J.
- 15 Delmarva Hamfest at Wilmington College, Wilmington, Delaware. Only about an hour away from Phila. Talk-in 13/73, 94/04, 75/15
- 19 SECOND OUTDOOR MEETING OF THE SEASON, Nostalgia Nite 8:00 P.M. QTH, K3GAS, Doc Cutler, 7815 New Second St., Elkins Park, Pa. Slides, films, special narration, refreshments, of course. XYL's and YL's especially invited.
- 22 Warren, Ohio - Hamfest
- 28/29 Computer Fair, Shelbourne Hotel, Atlantic City, N.J.
- Don't forget that Hamarama is only 3 months away, October 3rd is the date!!
- * Antenna measuring contest on 432, 1296 and 2304 Mhz. Free Flea Market. College in Ewing Township, N.J. see map of N.J. and follow signs from Rte 1.

SEPT.

South Jersey Radio Assn. 28th Annual Hamfest; Sept. 12, 1976 10-5 P.M. at Melia Farms, Malaga, N.J. Lake, picnic grounds and food available. Tailgate sales, swap shop and door prizes. Family tickets: Advance sales - \$2.50, gate sales \$3.50. Advance sales send S.A.S.E. to Jack Koch, Box 103, Cherry Hill, N.J. 08002. Talk-in 146.52. First prize Swan 700CX plus AC power supply.

* * *

BELOW IS THE TEXT OF A TELEGRAM SENT TO PRESIDENT FORD ON FRIDAY, JULY 9.

"We are concerned about persistent reports that a special committee said to be acting upon instructions from the White House might recommend withdrawal of vital frequencies actively used by the Amateur Radio Service in order to create a new General Radio Service apparently desired by certain commercial interests. The more than one quarter million licensed, qualified, and law-abiding radio amateurs of the United States request your assurance that frequencies now assigned to the Amateur Radio Service will be respected and protected by the United States Government."

Harry J. Dannals
President, ARRL

NEW PRODUCTS OF INTEREST TO HAMS

By Lyn, W3NSI

1. Channel Scan T/R for 144 Mc and 440 Mc: KLM Electronics is selling two new FM units that cover 23 channels with a manual switch and four on automatic scan. In this way, it is possible to set up the 4 most popular frequencies to be scanned. All channels transmit and receive, are crystal control operation, with 2 RF stages on receive being used in each set. The receiver can be tuned over 5 KHZ plus and minus (RIT), which is often handy when operating simplex with some stations a bit off frequency. Both 10 and 1 watt levels can be used on transmit. A tone oscillator is built in for test or control purposes. Price-Multi 11 (2M \$325) Multi U 11 (440 \$379) - 17025 Laurel Rd. Morgan Hill, Cal. 95037

2. Tempo MR 2 Receiver: The MR 2 covers a frequency range of 140 to 170 Mc using plug in crystals, and covering the range with 12 channels. Unit is very compact (shirt pocket size) and comes with Nicad batteries and charger. Could be used as a 2 meter monitor at work, in the car, etc. Price \$80.00 Available from Henry Radio and Trevoze Electronics.

3. Two Meter FM Portable: The new ICOM 215 cannot be classed as a handee-talkie since it is more in the class with the TR 22 from Drake. It has the advantage over the Drake in that the whip antenna pulls out the top with the set standing on end, its normal position. The operation controls are then in line along the front vertically. It also has a power switch of 3 watts or .4 watts as needed. In many respects it is an easier rig to work with than the TR22. Power is provided by 9 "C" cells inside the case. External power and antenna can be connected. Price (not available) Should be at Trevoze when this is published.

* * *

PACK-RAT PICNIC

BY CARL, K3DLS for the Committee

The Pack Rat Family Day Picnic is ready for everyone to come to Ft. Washington State Park in Flourtown on Sunday August 8, 1976 at 10 A.M. Talk in will be 146.52 Mhz, simplex and 222.98 - 224.58 Mhz, using WR3ACD the Club Repeater. Registration is just \$2.00 for the entire family. All small children will get the Pack Rat Goodie bag. There will be soda for all. Games will be for everyone and how about getting into the egg toss which only requires you to toss and catch a little egg! Bingo, Quoit tournament, plus a lot of eyeballing will also prevail during the day.

This year the prizes will be divided into three groups! Ham, YL, and general prizes. When a person wins they can select any prize from their group or from the general group. So take a good look at the prize table to see what goodie you would like. So far, at the early date this is written, prizes have been donated by Pack-Rats, Tab Books, Ham Radio, Spectronics, Inc., RCA, and J.W. Miller Division of Bell Industries. Invitations have been sent to the local Clubs and so far Penn/Jersey YL, QCWA, Mobile Sixers, and PENNARC, are joining the Pack Rats.

Plan to have lunch and supper at one of the nicest parks in the area. See you there and talk the picnic up in your Club and on the air.

* * *

JUNE 12, 13 VHF QSO PARTY RESULTS

<u>Band</u>	<u>Contacts</u>		<u>Points</u>	<u>Mult.</u>
50 Mhz	403	x 1 =	403	50
144 Mhz	440	x 1 =	440	21
220 Mhz	117	x 2 =	234	15
432 Mhz	70	x 2 =	140	17
1296 on up Mhz	22	x 3 =	66	10
TOTALS	1052	QSOs	1283	113

Claimed Score: 1283 x 113 = 144979
(points) (mult) (final score)

MID ATLANTIC 2 METER ACTIVITY NET STARTED

Look for Northern Virginia and Maryland/D.C. area stations with good signals into the Delaware Valley on Wednesday evenings at 9 PM on 145.025 Mhz - SSB.

NEW BEACON ON 6 METERS

CW on 50.190 Mhz recorded by W2AXU from WA6MHZ. San Diego, California - 15 sec. on 20 sec. off.

Gary Dallas, is now ex WA3YZC; his new call is W4LYHO.

Application for Membership: WB3AFY, Sam Martinez, 625 Kingston Road. Middle River, Md. 21220
301-391-0533.

* * *

1976 Field Day, QRP Style

By Ric, WA3UDS

As K3GAS put it when he heard my Field Day results, "more power to you, Ric". And as I objected, "I don't really need more power." WA3UDS/3, with some guest-operating help from those famous QRP'ers. WA3AXV, WA3JUF and WA3NFV, operated on 3.5 thru 432 Mhz with 0.3 to about 4 watts power. We totaled 23 hours of operating time and accumulated 203 QSO's (3.5-81; 7.0-2; 14.0-3; 21.0-46; 28.0 36; 50-5; 144-14; 220-8; and 432-8). I don't know which of the records was the most amazing: working 15 QSO's per hour for 5 hours running 2 watts on 80 meter SSB; getting 8 QSO's on 432 cw running 0.3 watts, working a total of 35 sections, or raising my total of states worked with less than 2 watts to 46! This was the first time I've used the Argonaut (to a 160 foot open-wire fed dipole) in a portable location and its performance was fantastic. Special thanks go to WA3NFV for his human T/R switched 432 Mhz Xcvr, to K2KJI, K3BPP, K3IUV, WA3UXM and WN2ECH who contributed equipment to the operation, and to the ARRL for providing excellent propagation and weather conditions. Honorable Mention goes to all the Pack-Rats who called in and boosted the QSO count.

* * *

VHF/UHF REPORT

By Jo W2EIF

The six meter band has produced some good openings to the South and West and was particularly good during the Field Day operations, June 26 and 27. Stations could be heard and worked all over the USA during that weekend. The conditions for Es were excellent Sunday, June 27, and extended at least up through 145 Mhz. It was responsible for one of the best E skip openings that I have ever encountered on 2 meters.

The band opened at about 7:15 p.m. EDST and lasted until 9:56. I almost missed it because when I just checked the receiver I thought that the signals were on 6 meters and started back to the work bench since I wasn't particularly interested in working that band at the time. During the opening, I worked 6 stations in Texas, 2 in Oklahoma, 1 in Mississippi, 1 in Arkansas and 4 in Louisiana. These openings on 2 meters usually occur within plus or minus 30 days of the June 21 date.

You have to be lucky to make one of these openings because even the operators that consistently operate 2 meters can manage to be somewhere else at the right time. Lately, I have heard several new stations at 144.11 from the Harrisburg area. Most are of the usual low power class, with small or makeshift antennas. I have found that for most of the new stations, the novelty wears off quickly and I suppose they either go back to 2 meter FM or the low frequencies. The fellow that starts out by asking "whats the activity here on 2"? usually doesn't stick around very long on the band. Hope to hear some more E skip on 2 before the "season" is over.

* * *

OFFICIAL BULLETIN NR 598 FROM ARRL HEADQUARTERS NEWINGTON CT JULY 1 1976 TO ALL RADIO AMATEURS BT: Headquarters is looking for volunteers for our recently expanded Intruder Watch program. As a part of preparation for WARC-79, ARRL will be playing a much more active role in the program, to more aggressively defend our amateur bands. If you are willing to devote a few hours a week to patrolling the amateur bands for non-amateur stations, write Intruder Watch, c/o ARRL, 225 Main St., Newington, Ct. 06111. AR

RTTY ANTHOLOGY

By Ralph Alexander WA3FOF
Transmitting (Part 5)

There are several things the newcomer to RTTY must consider before putting out a signal, and this is especially true on the HF bands. First, on these bands, FSK or frequency shift keying is the only type of RTTY transmission allowed by FCC regulation at full power or the operation is with a 100% duty cycle. So it is very important to remember this when planning the station, as most modern single side band and CW transmitters or transceivers are not designed for such hard use. Most transmitters are designed for operation at maximum with a 50% duty cycle which means key down 50% of the time. So with a 100% duty cycle for RTTY operation, there will be problems with the finals, the driver, and the power supply; the transformer. So unless the finals used can be obtained economically, think twice before going that route. About the only way to use these modern rigs is to reduce the input power to about 25% of the rated CW power level, and also use a fan on both the power supply and the finals. By observing these precautions the modern rig will have a better chance of surviving in RTTY service.

There are two basic methods of generating FSK. The first is the accepted military method that is very simple and uses the output of an Audio Frequency Shift Oscillator fed into the microphone input of a single side band transceiver. This is fine with equipment as the Collins KWM-2A where there will be a minimum transmission of the unwanted side band and the carrier. So unless it is certain that the rig to be used is totally "clean," it might be wise to choose another route. This is to obtain the FSK from installing and using a Varicap in the VFO to change the frequency between the MARK and SPACE frequencies along with a potentiometer to set the amount of frequency shift.

There is also another variation that can be used, somewhat more technical. Find an "old boat anchor" transmitter with a rock solid VFO; a transmitter designed for AM-CW and was built to last forever. These rigs are usually found in basements or at flea markets. They can be had for a song as the ham market for something like this is very limited. Look for a transmitter rated at about 200-300 Watts class C input.

The next step is to test the "beast" into a dummy load for at least a one half hour. If it survives the "smoke test", start the modification for RTTY by installing the FSK diode in the VFO.

By the way, this same line of consideration applies to amplifiers. Those old class C "monsters" will work fine as most people who home brewed usually over-built them. If an amplifier is available remember the power may have to be reduced unless a heavier power supply is obtained.

FSK on VHF never did get off the ground because neither the transmitters or receivers were good enough from the frequency stability standpoint. So the route to go on VHF is AFSK, which is fed to the microphone input. Locally, there is some AM RTTY on 6 meters at 51.750 Mhz. and some on 2 meters. There is more RTTY on 2 meter FM on some of the lesser known channels 146.430 and 146.835 Mhz. With a 2 meter FM rig this is a good route to go. Most transistor 2 meter FM rigs do not have too much trouble with a 1/2 hour transmission as long as the VSWR is not too high. If it high, there will be all sorts of over heating problems. So check the VSWR.

The AFSK generator is very simple and it is just an oscillator with one 88 Mh. toroid to generate the tones. It is usually best to incorporate this right in the terminal unit when it is built as this will solve many problems such as adding the power supply and shielding. The method to key AFSK and also FSK is to use a polar relay with the armature or common at ground and use one contact for AFSK and use the other for FSK.

(to be continued)

NOTICE: THE BOARD OF DIRECTORS AT THEIR LAST MEETING VOTED TO HAVE ALL FUTURE BOARD MEETINGS ON THE SECOND THURSDAY OF THE MONTH. THIS NOW WILL PRECLUDE THE PROBLEM OF HAVING A BOARD MEETING FALL ON A WEDNESDAY BEFORE THE THURSDAY REGULAR MEETING.



- ..Congratulations to Jane Zimmerman (xyl W3ZD, BARCC Chairman) on passing her Technician exam at the FCC on Saturday July 24 during the Atlantic Division Convention.
- ..A speedy recovery to Lou xyl W3AJF recently out of the hospital.

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CONTACT: Sam Moskowitz, K3RTR, 401 Sansom St. Upper Darby, Pa. 19082. Phone: 215-352-0798

FOR SALE: H.P. VTVM, #410BR-\$50.00.

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Telrex. 6 mtr 3 element beam, #6M-309

(new) \$30.00. will swap any of these items

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CONTACT: Al Schnipper, W3AYJ, 1409 Glenview St. Phila., Pa. 19111

Phone: After 6 PM 215-RA 5- 2869

FOR SALE: Wood Boom Yagi Antennas for 2 mtrs. and above. Inexpensive, sturdy, termite proof. Horizontal/vertical polarization or both on any boom length shorter than 5 feet.

WANTED: 2 mtr. AM transceiver, 6 mtr. FM transmitter in working condition.

CONTACT: Earl Garber, WA3ZRE

Phone: 215-677-1699.

WANTED: HF amateur band receiver.

CONTACT: Rudy Rosenberger, 132 Coldstream Road. Phoenixville, Pa. 19460.

Phone: 215-935-1176

REPORT ON THE ARRL ATLANTIC DIVISION CONVENTION by Harry, W3CL- Program Chairman

"It was one of the better conventions", remarked Harry Dannals, W2TUK, President, ARRL. Doc Cutler, K3GAS, Registration Chairman, reported the official count as 1018. Hams and their families came from the eastern seaboard with others from Ohio, Florida, Illinois, Nevada, California, Washington State and our friends from Canada. CE0AE came from far away Chile, S.A.

The technical programs were well attended. Large contingents showed up for the ARRL forum (Moderator, W3HK) and the FCC forum (Moderator, K3ZAC) with featured speakers Harry Dannals, W2TUK and Charles Higginbotham, W3CAH respectively. Harry Dannals spoke about the ARRL training program and the embracing of CBers in the Ham ranks. Charles Higginbotham emphasized deregulation of Amateur Rules. (Continued on Page 11)

This is...(Page 7)

The Penn/Jersey YL's under the direction of Carolyn, W3GTC organized a beautiful ladies luncheon; good food, gifts and prizes, and the Ferkö String Band members. Nothing but raves



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MT AIRY VHF RADIO CLUB INC

20th ANNUAL

PACK RAT PICNIC

MOBILE 6ERS SUNDAY AUGUST 8 1976

QCWA

FORT WASHINGTON STATE PARK

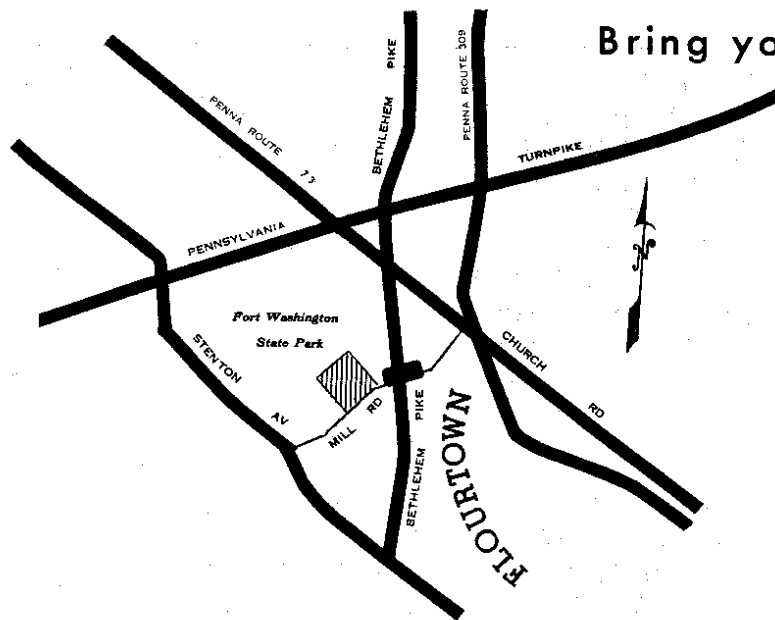
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THE AMERICAN RADIO RELAY LEAGUE, INC.

Administrative Headquarters NEWINGTON, CONNECTICUT U.S.A. 06111

July 16, 1976

A R R L B O A R D M E E T I N G H I G H L I G H T S

ARRL OBS: If transmission of this bulletin runs over ten minutes, don't forget to identify. Make extra transmissions if you can, because of the importance of this information. Thanks -- 73, W1NJM.

OFFICIAL BULLETIN NR 600 FROM ARRL HEADQUARTERS
NEWINGTON CT JULY 16, 1976 TO ALL RADIO AMATEURS BT

THE ARRL BOARD OF DIRECTORS AT ITS SECOND 1976 MEETING HELD IN DENVER COLORADO ON JULY 14, 15 AND 16, FORMULATED ARRL POLICY ON PROPOSED RULEMAKING IN DOCKET 20777. IN THE BOARD VIEW, BOTH BANDWIDTH AND TYPE OF EMISSION AS APPROPRIATE SHOULD BE USED IN DESIGNATING PERMISSABLE OPERATIONS. EXCLUSIVE SEGMENTS FOR PURE CW AND RTTY, NOW TO INCLUDE ASCII, SHOULD BE RETAINED, THOUGH THE CONTINUED NEED FOR 850 CYCLE SHIFT SHOULD BE REEXAMINED AFTER FIVE YEARS, AND RTTY SHOULD NOT BE PERMITTED IN HF PHONE BANDS. STANDARD AMPLITUDE MODULATION, NOT TO EXCEED SIX KHZ BANDWIDTH, WOULD BE PRESERVED, BELOW 28.5 MHZ AS WELL AS ABOVE, THOUGH THIS TOO WOULD BE RESTUDIED IN FIVE YEARS. ON TEN METERS, BANDWIDTHS WOULD BE 6 KHZ FROM 28.5 TO 29 MHZ AND 16 KHZ FROM 29.0 TO 29.7, WITH 40F3, WIDEBAND FM, ALSO PERMITTED FOR FIVE YEARS. PRESENT SSTV ALLOCATIONS WOULD BE UNCHANGED AND FAX NEWLY PERMITTED IN THE SAME SUB BANDS. STANDARD FM, 16F3, WOULD BE THE NORM IN THE PHONE BANDS ABOVE 52.0 MHZ, BUT WIDEBAND FM, 40F3, COULD CONTINUE FOR FIVE YEARS. AMATEUR TV WOULD CONTINUE TO BE PERMITTED IN TWO CHANNELS AT 439.25 AND 427.25 MHZ, EACH TO HAVE A NOMINAL WIDTH OF 4 MHZ, SHARED BETWEEN DIRECT AND REPEATER OPERATION, WITH RESTUDY AFTER FIVE YEARS. PRESENT RULES FOR PURITY AND STABILITY OF EMISSIONS AS FOUND NOW IN SECTION 97.73 WOULD BE RETAINED. PRECISE BANDWIDTH CRITERIA REQUIRING COSTLY ADDITIONAL INSTRUMENTATION SHOULD NOT, REPEAT NOT, BE IMPOSED. THE LEAGUE EXPECTS TO TRANSMIT THESE THOUGHTS TO FCC BY THE FILING DEADLINE FOR DOCKET 20777 OF AUGUST 4. THE LEAGUE ALSO WILL ASK FOR PHONE PRIVILEGES 145.0 TO 145.5 AND 222 TO 225 MHZ FOR NOVICES AND TO LOWER THE AGE FOR VOLUNTEER EXAMINERS TO 18. DISCUSSIONS WITH FCC STAFF ARE TO CONTINUE RELATIVE TO MULTIPLEXING OF AUDIO AND CONTROL FOR REMOTE STATIONS, FOR RELIEF FROM TAPE LOGGING AT AUTOMATIC REPEATERS, FOR RELIEF OF HEIGHT AND RADIATED POWER LIMITS ON SIX METERS, AND FOR DIVISION OF RESPONSIBILITY ON REPEATERS BETWEEN TECHNICAL AND USER PROBLEMS. TWO NEW LEGAL INFORMATION PACKETS ARE TO BE CREATED, AND LIMITED ADDITIONAL ASSISTANCE IN ANTENNA ZONING OR TRANSMITTER NUISANCE CASES UNDER CAREFULLY PRESCRIBED CONDITIONS WILL BE OFFERED. IN OTHER ACTIONS, THE BOARD APPROVED PLANS FOR EXPANSION OF THE HEADQUARTERS FACILITIES IN NEWINGTON, CT, DIRECTED THE ESTABLISHMENT OF AN OUTGOING QSL BUREAU, MOVED THE W1AW 160 METER FREQUENCY FROM 1805 TO 1820 KHZ EFFECTIVE SEPTEMBER 1, CREATED A TECHNICAL ADVISOR APPOINTMENT, DXCC ENDORSEMENTS FOR 160 METERS AND RTTY, AND REMOVED FEES FOR OPERATING AWARDS TO MEMBERS. THE BOARD ALSO VOTED TO ENCOURAGE MORE OPERATION OF FD STATIONS IN PUBLIC AREAS, TO STREAMLINE PROCEDURES FOR LIFE MEMBER APPLICATIONS, CONDUCT A MONTHLY PROPAGATION COLUMN IN QST, AND PROVIDE A LIST OF ALL MATERIALS AVAILABLE FROM HEADQUARTERS. STUDIES ARE TO BE CONDUCTED OF NATIONAL REPEATER FREQUENCY COORDINATION, A HALL OF FAME FOR AMATEUR RADIO, MOVING W1AW TO MORE CENTRAL LOCATION, EXTENDING AMATEUR GENERAL CLASS PHONE PRIVILEGES TO 3825-4000 KHZ, GROUP INSURANCE LIABILITY FOR CLUBS, EFFECTS OF ANTENNA HEIGHTS ON RFI, AND MEANS FOR EX-HAMS TO BE RELICENSED WITHOUT REEXAMINATION. COMPLETE MINUTES WILL BE PRINTED IN SEPTEMBER QST. AR

HK1TL TO BE ON OSCAR 7B
By Tony Souza, W3HMU

During the last week of July and the first week of August the Pack Rat Columbia Moonbounce Dxpediton will be on Oscar 7 mode B whenever possible. Operations on O-7B will be made possible by the loan of a 432 Mhz solid state transmitter from AMSAT. Also included were two antennas, a two meter 5 element yagi and a 432 Mhz 8 element yagi on a camera tripod. The transmitter is one of two KLM Echo 70 units owned by AMSAT through a grant from the Northern California DX Association. The Echo 70's are to be used for Dxpeditons and demonstrations just like ours.

A Satellite system was designed by W3HMU and WA3NFV which operates solely from a 12 volt car battery. It uses the Echo 70, an FET 2 M converter and a Radio Shack, AX-190 solid state SSB/CW receiver. The system was tried out on Sunday July 11 and Monday, July 12 on two Oscar orbits. It worked FB and 7 contacts were made. The system can be set up and operated almost anywhere in about 10 minutes time. Using this system we are confident that HK1TL will provide the first South American contact for many of the Oscar 7B devotees.

Many thanks to WA3LND, Tom Clark and W3KMW Bill Tynam of Amsat for their help and cooperation.

EDITORS NOTE: In a letter to Bill Olsen, W3HQT, W.S. Carrey, ZE5JJ of Salisbury, Rhodesia writes, "It's fellas like you that have put EME on the map, and you are to be congratulated for your determination to press home and get the job done."

FLASH!! 1386 Pounds of Dxpediton material was shipped to Columbia, S.A. via Air Freight the evening of July 20, 1976.

* * *

OFFICIAL BULLETIN NR 599 FROM ARRL HEADQUARTERS NEWINGTON CT JULY 8 1976 TO ALL RADIO AMATEURS BT: Here is clarification of several points raised regarding Docket 20282. Effective July 23 full credit will be given for an exam elements taken by mail when an amateur attempts to upgrade. This means that a current Technician/C need only pass the 13 wpm code test to obtain the General Ticket. FCC asks that amateurs currently holding Technician/C or Conditional licenses not to send them to FCC solely for the purpose of modifying them to reflect the non-Conditional status. The present Conditional licenses will automatically carry full Technician or General privileges after July 23. Additionally, the holder of a current Conditional can supervise Novice exams after July 23 provided that he is 21 years or older and unrelated to the applicant. AR

REPORT ON ARRL ATLANTIC DIVISION CONVENTION (cont'd from page 7)

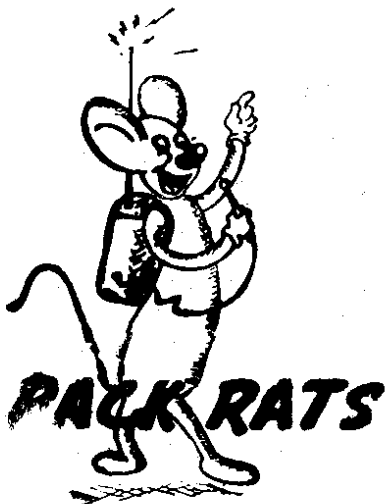
Thanks to our PR man, WA3PZO, convention news was covered on Friday evening from Chan.6ABC; Saturday on Chan. 10(CBS)and Chan.3 (NBC) where an interview with Chairman, W3ZD was featured.

Louise Moreau, W3WRE, the Historical Chairman directed the Antique Wireless and OOTC old time radio displays as well as Lou's telegraph key collection. The periodic crash of the Spark rig drew the expected attention. A special Morse Telegraph Club circuit installed by WA3LAK added to the nostalgia. Other exhibits under the control of Frank Widmann, WA2YSW, featured the Ham operated small electronic firms. Ham Radio, 73 and CQ did their usual brisk business. The ARRL booth active in the lobby was manned by ARRL staffers and even our old friend W3AJS did a stint. ARRL officers were also there to answer questions.

Paul Mercado, W3FBB and company made the Saturday night reception and banquet come to life. A new convention feature was the display of a huge ARRL banner provided by Connie-Mac, W3SW, our Atlantic Division Director. The MC, Ed Kushner, W3HKZ kept things moving along. A welcome by W3ZD; the Invocation by Father Stan, WA2BCX. After dinner, W3SW spoke about Philadelphia, the "cradle of liberty". Harry Dannals presentation included recognition of a number of outstanding YL Hams in the audience. He made a heart warming presentation of plaque to Mae Burke W3CUL (organist par excellence) recognizing her devotion to Public Service. Another plaque to Chairman Dave Zimmerman. Both recipients surprised and overwhelmed. The American Revolution Administration represented by Sherrie Hall (xyl K3CQ) presented a membership certificate and flag to the ARRL which was accepted by W2TUK. RADM Ray Schneider, USN(Ret.), W3MJE, the keynote speaker delivered a magnificent historical and technical review of "200 Years of Communications". His predictions of things to come held the crowd spellbound. A hilarious Wouff Hong Ceremony was presented after the banquet by the Penn Wireless Club.

Thanks to all the committees and the young people from the NE radio Club and PennARC. We are indebted to the ARRL staffers and officers for their support and encouragement.

Cheese Bits
 2087 Parkdale Ave.
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