

PACK RATS'



PACK RATS

CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB, INC.

CHEESE BITS



MT. AIRY VHF RADIO CLUB, INC., PHILADELPHIA, PENNSYLVANIA
50.125, 144.150, 220.125, 432.110, 1296.110 Mhz - W3CCX - Repeater 222.98/224.58 Mhz
Affiliated Club: AMERICAN RADIO RELAY LEAGUE
Meetings: Third Thursday of each month at 8:00 P.M.
Southampton Free Library, 947 E. Street Road
Southampton, Pennsylvania 19866

ARNS

VOLUME XXX

JULY, 1988

NUMBER 7

THE PREZ SEZ

June is more than half gone already and Summers' heat has already started. Fortunately, the weather for the June QSO Party was excellent - cool and clear. For some of us this was our first time to the field in Hilltown, Pa. For others it was revisiting an old haunt. Phil, WA3NUF (who was not the chairman), organized this club activity and did an excellent job. We had a good turnout of club members, plus some excellent assistance from members of the Suburban Amateur Radio Club (the K3MTK Boys). We turned in a good score and everyone had a fine weekend.

The June meeting was election night and the last meeting at the library until September. Congratulations to all the newly elected officers and board members. It looks like a good crew for the next year.

The July meeting is the first outdoor meeting of the Summer and our annual WhiteElephant Sale. In keeping with tradition, this meeting will be held at the home of Dave Zimmerman, W3ZD - out back in Zimmermans' Glenn. Bring your good goodies (or your not so good goodies) to this club event. Even if you don't need anything now, you just may find something that is impossible to live without. And, it is always always a good time. CU in Zimmermans' Glenn..

Bob, N2SB

* * *

THE UNOFFICIAL W3CCX JUNE CONTEST by Phil, WA3NUF

Another June Contest is history and the only question that remains is: Will Hilltown be the same after the Pack Rats?

The troops began arriving at the Hilltown Field at noon Friday; by 5 PM all the towers and antennas were up. By 10 PM more than half the stations were operational. We were joined this year by half a dozen members of the Suburban Amateur Radio Club. Luckily we discovered early on that they're as crazy as we are - they fit in perfectly. Truthfully, we set a lot of ambitious goals for ourselves this year and I don't think we could have accomplished half of them as well as we did without the help of Bob, Ron, Larry, John, George and the rest of the Suburban crew. We all made a lot of new good friends during the weekend.

(cont'd on Page 4)

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MEMBERSHIP MEETING: THE THIRD THURSDAY
OF THE MONTH, SWAP SHOP ITEMS - NO CHARGE

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8:00 PM - 144.150 MHz
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8:30 PM - 224.58 MHz
9:00 PM - 432.110 MHz
9:30 PM - 1296.1 MHz

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* * *

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- 2 -

CALENDAR OF COMING EVENTS
By Harry Brown, W3IIT

JULY

- 1 +/- 1 month look for more 6 meter openings to Europe
- 2 EME Perigee
- 3 9th Annual Hamfest and Computerfest by the MURGAS ARC at Ice-A-Rama at the Coal St. Sports Complex in Wilkes-Barre, Pa - Talk-in on 146.61, and 146.52
- 4 Independence Day - Parade in Phila. from 20th and Parkway to Independence Hall
Harrisburg Hamfest at the Bressler Picnic Grounds
- 13 New Moon
- 14 Pack Rat Board of Directors meeting will be held at the QTH of Harry, W3IIT at 8 PM. All interested parties welcome. Call 215-584-4846 for directions.
- 16-17 CQ Worldwide VHF QPX Contest. See CQ Magazine for rules or June QST page 103
- 20 +/- 3 weeks. Look for 2 meter sporadic E openings
- 21 JULY meeting of the Pack Rats will be the Annual WHITE ELEPHANT SALE at ZIMMERMAN's GLEN (W3ZD's QTH) on Centennial Road in Warminster, Pa. Centennial Road is one street south of Rte 132 and about one mile West of Rte 232. Beware of the famous Grab-Bags. Meeting starts promptly at 8:00 PM. Refreshments available.
- 28 Predicted peak of the Delta Aquarids shower at 2100 UTC
- 30 EME Perigee
- 31 BRATS Hamfest, Baltimore, MD at the Howard County Fairgrounds.

* * *

TID BITS

Sunspot No. for May 1988 = 59.7, Smoothed No. for November 1987 = 46.7.

Congratulations to Kay Craigie, KC3LM was awarded Amateur of the Year at the Atlantic Div. Convention. Kay, who is also the EPA SM, was the Chairperson at the Amateur Radio Session at the recent IEEE International Conference on Communications '88 held in Philadelphia, Pa.

Received a note from Herb, K2LNS who was single-opping from a mountain top near Wilkes-Barre, Pa during the VHF QSO Party. Worked W3CCX on all bands. His approximate score -255,000

W3ZD reports that reference is made to the Pack Rats and WA3AXV on page 31-28 in the 1988 ARRL Radio Amateurs Handbook.

Carl, K3DLS and Charley, K3HSS have been hospitalized recently - wish them speedy recovery.

PROPAGATION REPORT

Paul Drexler, WB3JYO

Propagation during the past month has been nothing short of exceptional, with several Es openings on 2 and almost daily Es openings on 6.

Six meters was open to south FL on May 26th however, the opening was rather limited. The following day, on the 27th, 6 was again open to FL, GA, AL, TX, and KS. At 2230 hrs. 2 opened to south FL to grids EL98, 94, 97, 96, and 88. Signals were all 55 to 59 for a solid hour! On the 28th 6 was again open most of the day to FL and VP5D in FL31 (Turks and Cacaos Is) with good signals at 1150 GMT. On the 30th at 0130 GMT, 2 was opened to FL for a short period; 6 was open to FL, TX, MS, AR, and AL around 2300 GMT. Six was open to 4 and 5 land and local tropo enhancement was observed on 2 around 2200 GMT on the 31st.

The excitement continued on June 1st with 6 open to most of the SW and western US. Several southern CA grids were worked and EL16 - the southern most tip of TX - was worked where only one station claims to be active on 6. Mexico city was heard on 6 for a short time but went QRT before many stations could work him. WC2K reports working WB4TWX (EM94) on 2.

A 6 meter F2 opening on the 6th made literally hundreds of UK stations available starting at 1700 GMT. Although the UK's are restricted in ERP (most running 10W or so) stations were spread up to and above 50.3 MHz; N3BBI reports working 100 UK stations. As Mike and others put it, it was nice to be on the 'DX' end of the QSO. Running several hundred watts and a decent yagi, US stations all had big signals into the UK. VO7AA (GN37) and FP/KA3B were worked at 2345 GMT.

Several Europeans were heard on 6 again on the 9th around 1300 GMT, however, the opening was short lived and few UK's were worked. From 1300-1400 the band opened to most of the Midwest and southern US.

During the June contest weekend conditions on the higher frequencies were generally average although there was some localized tropo enhancement Sunday morning (the 12th). Six however, was open to most of the US and as far south as the Caribbean during Saturday and Sunday evening. W3CCX worked over 100 grids on 6 during the contest!

CU in the openings!

* * *

THE UNOFFICIAL W3CCX JUNE CONTEST (cont'd)

Friday's accomplishments were celebrated in fine style by a small group at the Hilltown Inn thus bolstering the local economy. At last report the tavern owner was seen dancing on the roof.

On Saturday morning The Northern Rovers (N3BBI, WB3DNI, N3EAX) departed for what was supposed to be a 5-6 hour expedition to FN 21, FN 11, and FN 10. Fourteen hours later they returned; tired, hungry, and loaded with stories. They also helped fill-in the Grid Map on all bands by up to 3456 MHz in these semi-rare Grids for the microwave bands.

For the rest of us the contest started at 2 PM with Murphy following close behind. By comparison with the past few years where the worst equipment problem after the start of the contest was a blown fuse; this year was a Murphy nightmare. By the end of the contest every station had a warmed-up soldering iron at-the-ready and a couple of dead preamps/post/amps/power supplies, etc. strewn about the station. At one point it seemed that we were smoking GAASfets on the microwave bands at a rate of one for every dozen QSO's. In spite of the problems, the band captains demonstrated their usual resourcefulness and kept every band on the air throughout the contest.

On Sunday the southern Rovers set out to put FM29 on the 903 and above log. Six hours later the Rovers were back at Hilltown after lugging 7 bands to the roof of the highest building in Camden, N.J. - the last 70 feet via a service ladder to the rooftop!

As the end of the contest approached, the usual Sunday Night - "we're still missing too many Grids" - panic began to set in. Fortunately, Field Marshall Rick (WC2K) jumped in, making skeds, and pushing everyone over the top.

When it was over the survivors relaxed at the annual W3CCX post contest tailgate party conveniently located at the rear of N2SB's truck. 73, Phil - WA3NUF

(rough scores and credits appear on Page 6)

SWAP SHOP

FOR SALE: Mirage C1012 220 Mhz amp. 10 watts in/120 watts out - excellent cond. \$200. Hustler 3 e1 6 mtr beam - brand new in box \$40... Brother EM-401 electric typewriter w/memory(hvy duty model) - excellent cond. w/manual \$400. Euro-furniture systems 3-piece operating position. Piece #1:60" x 30" heavy duty operating table; Piece #2: 48" x 18" x 25" heavy duty table w/rollers; Piece #3: 2 - drawer file w/follers, disassembled in minutes \$200.

CONTACT: Harry A. Schools, KA3B
1606 S. Newkirk St.
Phila., Pa. 19145
Phone: 215-468-1512

FOR SALE: Kenwood TS-940 xcvr - new, unpacked \$1992.50 w/ant, tuner & mic.

CONTACT: W2SVV, Ceasar Arena
Phone: 609-883-6336

FOR SALE: (From Estate of W3KM)
Microlog - Act 1 Keyboard; Astron P.S. R550M - \$175; Ameritron AL80A amp - 1000W; 3-500Z tubes - \$500; Realistic amplified speaker \$10; Heathkit antenna tuner \$225; Yaesu FT757GX Hiband xcvr \$800; Sanyo Beta VCR VTC9100A - \$100; Vibroplex key #373909 \$25.

CONTACT: Doc, K3GAS
Phone: 215-635-1078

FOR SALE: Computer Goodies - Must clear Basement!!

2-MiniScribe 3012 Hard Disk Drives 10 Meg. Half High \$110.

2-Control Data WREN-1 Hard disk Drives 31 Meg. Full High \$330.

1 - Cipher Data Products Cartridge Tape Drive Model 540CT \$250.

1 - IBM Comp. CGA Color Card Half Slot \$45.

1 - IBM Comp. Parallel Printer Card \$15.

1 - AMPRO Z-80 CP/M System 4 Mhz 64K

2 drives/Terminal/Printer/Software Plug and Go \$450.

1 - SWTPC 6809 / SS-50 System full memory 3 disks/software \$300.

CONTACT: Bruce Loss - WA3YUE
Work (215) 542-6405
Home (215) 947-4166

FOR SALE: Transverter - MMT/220-50 \$150; Tube amp. & sply - rack mount - 10 in 350 out (220) \$250; (4) 1296 Mhz loop yagis & frame & pwr divider \$250; (2) 16 ele. KLM 432 Mhz antennas \$250; (1) 1296 Mhz spectrum loop yagi \$10; 4KW generator - 220/110 VAC \$200; Damaged Equip: (2) Telephone answering machines \$100; IC-551 Make offer - 432/285 MMT transverter - make offer; WANTED: 6M all mode IC-551 - Etc. 6M Duplexers, 6M equipment in general. 2M 10W/transverter, 6M transverter (10M I/F)

CONTACT: Marty, WB2GEZ
Phone: 609-758-8865

FOR SALE: 50 Mhz converter (Drake), 432 Mhz converter (Parks) Best Offer. WANTED: Cushcraft 220 Mhz Boomers plus an H frame for 220 Mhz (8 or 10 ft.)

CONTACT: Herb, K2LNS
Phone: 717-472-9245

FOR SALE-OR SWAP: Henry 4K W/8877 tube for 80-10 Mtrs. w/hvy duty P.S. \$475. Xerox 820, 280 computer - 2-8 in. drives, keyboard; 2 - serial ports; 2 - parallel ports; software to run packet BBS on 2 ports - \$250.

CONTACT: K3GYS, Gus Nicoletta
Phone: 609-767-3628 anytime

FOR SALE: Alan 50V10 step attenuators, 0-10db, 1.0db steps, 1 watt, 50 ohms, max swr 1.4:1 @ 2 GHz, insertion loss .4dB @2 Ghz. One SMA connector, One "N" connector, spec sheets, Pack-Rat price \$250.

CONTACT: W3GXB, Robert G. Fox
1776 Street Road
Southampton, Pa. 18966
Phone: 215-322-6248 evenings

* * *

COMMERCIAL ADS

LOOP YAGIS: 902 Mhz 33 element \$80 kit, \$97 assembled and tested. 1296, 45 element \$80 kit, \$97 assembled tested. 1296 - 55 element (New "Super Looper") \$95 kit, \$119 assembled and tested. 2304 - 45 ele. \$70 kit, \$89 assembled & tested. Also, available: Element & hardware kit for above, 2 & 4 way power dividers, stacking frames, & power dividers. Discount on complete arrays. Solid State Linear Amplifiers, 13.8 V.D.C.: 1296 Mhz 8W in 35W out \$305 (\$210 in kit form) 1 watt in 18W out \$255. 902 Mhz 10W in 40W out \$305, 1 watt in 20W out \$255. Coming soon: 65 watts solid state linear for 1296. GAAS FET 1W \$170, 2304 0.4W \$219, 2304 preamp \$63. Universal 1 Ghz L.O. kit \$44 less xtal 700-800 Mhz L.O. kit \$47. Xtals available. Write for complete catalog: DOWN EAST MICROWAVE, Bill Olson, W3HQJ, Box 2310 R.R.I. Troy; ME 04987 (207) 948-3741.

VISITORS - JUNE 16, 1988 MEETING

WB2YEH - Bob Fischer - Pennsauken, N.J.
 WA3WAK - Larry Chinofsky - Holland, Pa.
 KA3QYH - Ron Wenig - Bensalem, Pa.
 WA3NAY - George Jensevskyj - Phila., Pa.

DROPPED FROM MEMBERSHIP

WB3CDE, WB3CPW, K3HW,
 KD6KD

CLUB OFFICERS FOR THE YEAR
 1988-1989

President - N2SB - Bob Cook
 Vice President - WC2K - Rick Connor
 Cor. Secretary - WB3JYO - Paul Drexler
 Rec. Secretary - WA3AQA - Walt Zumbach
 Treasurer - K3GAS - Doc Cutler

DIRECTORS - 2 YR. TERM

WA3AXV, Ron Whitsel
 K3GYS, Gus Nicolella

DIRECTORS - 1 YR. TERM

WB3DNI - Pat Cawthorne
 WB2VLA - Dave Power

* * *

JUNE CONTEST ROUGH SCORES AND CREDITS

<u>BAND</u>	<u>QSO's</u>	<u>GRIDS</u>	<u>OPERATORS</u>	<u>ROVERS</u>	<u>VISITORS</u>
50	353	128	WA3AXV	N3EAX	K3BPP
144	400	46	N3BBI	N3BBI	W3CL
220	128	30	N3CX	WB3DNI	K3ESJ
432	140	36	WB3DNI	KA2NYF	W3HMU
903	26	12	WB3ESS	WA3NFV	WA3PUL
1296	58	19	W3GXB	WC2K	WA3TSE
2304	24	8	K3IPM		KB3XG
3456	6	4	WA3JUF	<u>POWER & INTERCOM</u>	W3ZD
5760	2	1	WB3JYO	WA3YUE	
10Ghz	4	1	WC2K		
24Ghz	1	1	W3KKN	<u>TOWER & GRND CREW</u>	
	<u>1142</u>	<u>286</u>	WB3KRW	W3AJF	
			KA3KSD	W3CXU	
			WA3NAY	K3GAS	
			WA3NUF	W3IIT	
			KA3QYH	K3IUV	
			N2SB	WA3LBI	
			WA3WAK	KA3MGB	
			WB2YEH	W3VIR	
			W1YHO		
SCORE:	481,338				

Communication Within the Marshall Islands

Communication within a country of only 70 square miles normally would not be a problem...if this small land area was massed together. But in the Republic of the Marshall Islands, this tiny amount of land is spread amongst more than 1,000 islands scattered over a half million square miles of the Pacific Ocean. So from the earliest days of human habitation, communication has been the backbone of this society.

Initially, outrigger canoes were the only means to send word from one island or atoll to another. One has to admire both the courage and navigational abilities of these so-called "primitive" sailors, for they would cross hundreds of miles of open ocean and accurately arrive on a strip of flat land that is not even visible beyond the near horizon. They had no modern compasses or marine radios for emergencies. They knew their way because each and every navigator had carefully studied a chart of pandanus wood, coconut fiber and sea shells. From these, wave patterns and island locations were precisely known.

The ancient art of Marshallese navigation and long-distance outrigger communication has essentially vanished into history. But the communication that is now making history on the Marshall Islands is the modern electronic version.

Granted, three-element beams or towers do not dominate the skyline, and even telephones will not be found in most homes of the highly Westernized capital of Majuro, but there are a few amateur radio operators based on both the atolls of Majuro and Kwajalein. There are, of course, not the large number of hams as in the big cities of the United States with their special interest groups. Yet, for instance, on Kwajalein, there are enough operators to have their own club and two-meter repeater. And individual hams have as up-to-date gear and radio interests as could be expected anywhere on earth!

Most of these hams have come from other parts of the world, bringing with them both their hobby and their distinctive accents. So while you may find a KX6 station on the air that can give you a taste of what the official language of this Micronesian nation, Marshallese, sounds like, you are actually more likely to find operators with varying degrees of knowledge of Marshallese and speak with American, Australian, or even Tuvaluan accents.

If you should want to become portable or perinent DX yourself in the Marshalls, the agency to check with, especially for non-U.S. hams, is the Department of Transportation and Communication.

Yet even without making the long trip, you can tap into "Radio Marshalls"

WSZQ, "The Mighty Voice of the Marshalls", a short-wave station at 6.070 and 4.940, and also broadcasting at 1.090 Mhz, between 7:00 AM and 10:00 PM local time, (19:00 to 10:00 UCT), at 10,000 watts. World news is the simple re-transmission of Voice of America or Radio Australia. There is also local news given in both Marshallese and English, as well as popular music of all sorts, (rock to country), from the United States and elsewhere, intersperced with Marshallese songs. If trying to attune your ears to the initially strange sounding tongue of Marshallese, it is safer to concentrate on the spoken broadcast rather than the music, because other Pacific Islander songs are played and you may end up being enchanted by a Gilbertese melody by mistake.

On the two main population centers of Majuro and Ebeye, (Kwajelein Atoll), with over 20,000 people between them, there are less than 1,000 phone numbers. (This figure excludes the American base on Kwajelein Island itself, next door to Ebeye.) As strange as it may seem, cars and taxis serve as good replacements for telephones, especially on Majuro. For only 30¢ for a taxi ride to anywhere within the metropolitan area, a telephone can seem to be rather a luxury. And when all else fails, the old method of putting on foot in front of the other and visiting in person, is hard to beat.

When someone who is without a telephone needs to contact an overseas location, (and does not have an amateur radio or is going to talk business), the Satellite Communication Station is able to make the connection. The dish used is monstrous! In a nearby office, an operator does the actual dialing for the caller. At \$4.00 a minute to the United States and even Guam, and \$3.00 to as nearby as the State of Kosrae, and as much as \$5.00 a minute to other places, one has a tendency to talk rather quickly. And telegraphs are slightly less, (40¢ per word), but still limit conversation.

The phoneless Outer Islands are kept in communication with the population centers and the outside world by means of a government owned single-side band, short-wave station on a marine frequency.

Electronic communication within the Marshalls is just beginning to open up, as the ancient wood and sea shell type has faded into non-existence. As Telex, HF, VHF, Business and other commercial radio begin to grow with this new nation, amateur radio will also expand. More and more KX6 call signs should be heard on the airwaves, and island names such as Jaluit, Enewetak, Namorik, Maloelap, Alingalapalap, Mili, and Ailuk may no longer be such oddities to non-Marshallese ears

--Yokwe im jiljilimjounñoul-jilu
(Greetings/love and seventy-three)

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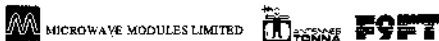
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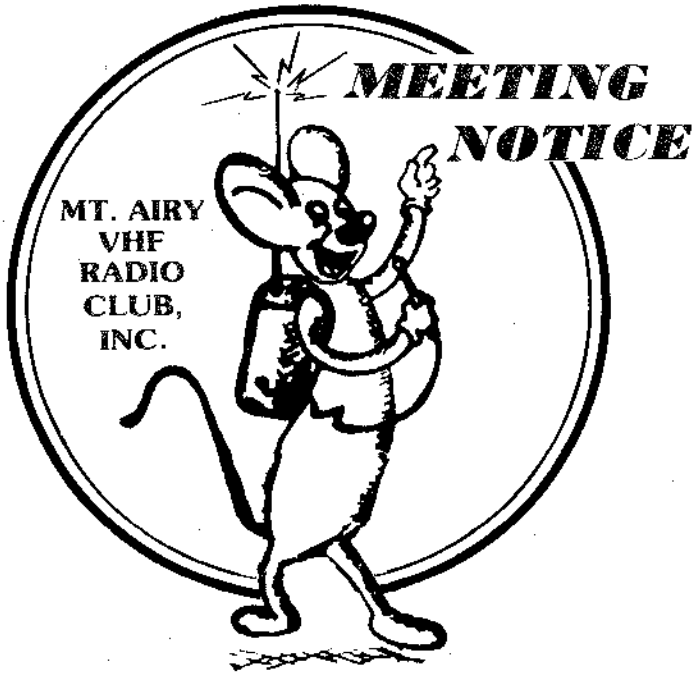
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