

PACK RATS'

SCANNED TO PDF BY BERT, K3IUV, 2012



PACK RATS

CLUB CALL: W3CCX//

MT. AIRY VHF RADIO CLUB, INC.

CHEESE BITS



MT. AIRY VHF RADIO CLUB, INC., PHILADELPHIA, PA. ARNS
 50.125, 144.50, 432.110, 1296.025 Mhz, WR3ACD - 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 18966

VOLUME XXII

SEPTEMBER, 1980

NUMBER 9

THE PREZ SEZ

As the warm days of Summer get cooler and the days shorten, it's time to start thinking about THE CONTEST. I'm happy to announce that Bill, WA2DPU, has volunteered to be Contest Co-ordinator for the January VHF Sweepstakes. I'm sure that you'll give him your full support as we get ready. It's our chance to again demonstrate our abilities - in operating, knowledge of the bands, equipment and organization. Most of us are pretty well equipped on 6 thru 220, so the area that most of us need to concentrate on is 432 and up. It's the area that will really pay off because of the increased value of the contest contacts. 432 is relatively easy to get on these days and the antennas are so small that it's feasible to stack a lot of gain on your tower. For the more adventuresome, there's 1296 where each contact is worth 4 times those on 6 & 2. There are at least 13 rats on 1296, so plenty of help is available. Ron, WA3AXV, will open up the indoor meeting schedule with a talk on a completely solid state 1296 station - all homebrew and "do-able" by the average rat.

For those of you interested in the higher bands, the microwave bands, I have copies of a package of microwave information received from Dave Evans, G3OUF. The information concentrates on narrow band (CW & SSB) techniques for X band above. Who will be the first Packrat on X band SSB?

If you didn't get to Doc's for the August meeting, you missed lots of good conversation, snacks and slides from the Packrats new projector (no more hassels trying to borrow or rent a projector). Thanks Doc for your and Loretta's good hospitality.

Don't forget the September VHF QSO Party - the 13th and 14th. If it's like last year, you won't want to miss it - the tropo was fantastic with 700 mile contacts common on 2 meters.

73,

* * * Harry, W3IIT

CAC REPORT By Bill, W3HQT

In the following months, I will try to write a brief review of CAC happenings particularly those that apply to VHF contesting. The Vast majority of CAC mail concerns HF contesting, and all has been fairly quiet lately after the onslaught of letters concerning the DX contest rules. There was talk of moving the 10 meter contest to Jan. on the same weekend as the VHF SS, but this seems to be put off for a while. There are rumblings about changing the rules regarding FM in VHF contests, maybe they just need a few more inputs from the rank and file! Send comments or suggestions to HQ via KIKI or to your local CAC member, that's ME!!!

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SWAP SHOP ITEMS - NO CHARGE

DEADLINE FOR ARTICLES IS THE GENERAL MEMBERSHIP MEETING: THE THIRD THURSDAY OF THE MONTH

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MONDAY NIGHT NETS NET CONTROL

7:30 PM - 50.125 MHZ W3CL
8:00 PM - 144.150 MHZ W2EIF
8:30 PM - 222.98/224.58 K3GAS
9:00 PM - 432.1 MHZ K3IUU
9:30 PM - 1296.025 MHZ W3CXU
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REC. SECY: K3IGX, DICK BOYLE
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DIRECTORS:

W3HQT, BILL OLSON (Ex-Of)
WA2DPU, BILL SMITH (2yrs)
K3NHX, JOE GARDOCKI (2yrs)
N3AHI, JIM HOLT (1yr)
WA3NFV, DAN MITTEN (1yr)

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ASK US ABOUT OUR WEEKEND.

TONY AND JAN W3HMU DOUG AND WENDY WB3KES
HARRY AND ROSE W3IIT DAN AND LUCY WA3NFV

CALENDAR OF COMING EVENTS

SEPTEMBER

- 1 LABOR DAY - In case you are interested, this day was first made a legal holiday in 1894.
- 3 School Opens Today!!
- 4 Roll-film camera patented by George Eastman 1888
- 4 Board of Directors Meeting, QTH WA2DPU, Bill Smith, 47 Langdon Road, Burlington, New Jersey 609-386-4504
- 6 Sussex ARC Hamfest, County Fairgrounds, Augusta, N.J.
- 7 GRANDPARENT DAY
- 7 South Jersey Radio Association Hamfest, Pennsauken High School, Rt. 73 and Hylton Rd. (Just off Palmyra Bridge), Pennsauken, N.J. A good local hamfest - nice prizes, and a good chance to eyeball and ragchew with our good neighbors "on the island". Info. and reservations Fred Holler, W2EKB.
- 11 ROSH HASHANA - Jewish New Year - 5741
- 13-14 ARRL - VHF QSO PARTY
- 13-14 23rd Annual Penna. QSO Party, Sponsored by Nittany ARC, State College, Pa. Info: QST for August.
- 14 Gaithersburg, Md. Hamfest - One of the bigger hamfests in the East. About a 3 hr drive from the Philadelphia area.
- 17 Citizenship Day
- 18-20 TENTH ANNIVERSARY - Pack Rat DXpedition to Rodantha, N.C. to break the 1296 MHz record in conjunction with the East Coast VHF Society, Horses Neck, LI. Besides missing the record certain ice buckets are still missing....
- 18 First Indoor Meeting of the Season - Southampton Free Library, Street Road, Southampton, Pa. 8:00 P.M. PROGRAM: WA3AXV, Ron Whitsel with speak on 1296 MHz Solid State Construction and Application. The Mario Raffle - Frankie's Silent Auction, Refreshments. An open meeting to one and all and especially to those new VHF-ers who want to join the best club around.
- 20 YOM KIPPUR - The Day of Atonement
- 21 NY-LIMARC Sponsors ARRL Hamfair '80 at the Islip Speedway, Contact: Sid Wolin, K2LJH, 516-379-2861.
- 22 Fall Begins - Autumnal Equinox, 4:09 P.M. Equal length of Daylight and Nite time. Only one fourth of the year left. Better get started on those income tax affairs and problems....
- 25-28 National Computer Show, Philadelphia Civic Center, Philadelphia, Pa.
- 27 QCWA - Delaware Valley Chapter Dinner - Meeting at Williamsons, Horsham, Pa. Speaker: Bob Gleason, W3KW, author of "Icebound in Siberian Arctic" - A true story. For an interesting evening of adventure, romance and old time radio - don't miss this meeting! (Tnx to Sid Deitz, W2FDE, program chairman).

FOURTH ANNUAL MID-ATLANTIC STATES VHF CONFERENCE PROGRAM

Mid-Atlantic States VHF Conference, Sponsored by the "PACKRATS" October 4, 1980 starting at 9 AM at the Warrington Motor Lodge. Location: Routes 611 and 132 in Warrington, Pa.

0900 FM Forum moderated by Larry Will, K3ADS, former area amateur RPTR coordinator in the Delaware Valley. Panel will include area repeater managers and operators who will discuss the present day problems of repeater operation from 50 Mhz to 1296 Mhz and the impact of newest regulations.

1000 AMSAT - PAST AND FUTURE

1100 Low Noise amplification by Paul Wade, WA2ZZF. Presentation will include latest GASFET technology and means for achieving optimum system performance using pre-amplification.

1200 Smorgasborg luncheon ala WARRINGTON \$4.50 per

1300 10 GHZ technology by Dr. Bob Atkins, KA1GT, Yale University. A review of the present day state of the art in system operation including power generation and receiving methods is planned. A few of the high points for 10 GHZ moon-bounce will be touched on.

1430 144 MHZ antenna arrays by Dave Olean, K1WHS. The construction of a huge moonbounce array at his own QTH for moonbounce work will be shown by Dave, as well as many useful pointers in design and erection or more modest arrays for terrestrial operation.

1600 VHF power amplifiers by Bill Olson, W3HQT. Bill has been very active in the design and fabrication of solid state power amplifiers for VHF on a practical level and has agreed to give us some insight into this technology.

1830 Cocktail party, Packrat hospitality room

1930 Buffet style Dinner \$9.00 per person. Advance Reg. Required

Also, the Packrat hospitality suite will be open starting at 7 P.M. on Friday evening, October 3rd for a general get-together for early arrivers and club members.

Don't forget, the PACKRAT HAMARAMA, one of the East Coast's best flea markets starts on Sunday, October 5, at 8:00 A.M. - Just a short walk south of The Warrington Motor Lodge.

73, Dave Zimmerman, W3ZD

Conference Chairman

* * *

CALENDAR OF COMING EVENTS CONTINUED FROM PAGE 3

SEPTEMBER CONT.

27 Elmira, N.Y. Hamfest. Sponsor: Elmira Amateur Radio Association. W2ZJ.
Chemung County Fairgrounds, Horseheads, N.Y.

27-28 National Capitol DX Association will present DXPO - Two days of forums and conferences. Info: Dick Vincent, K3AO.

* * *

VISITORS AT THE AUGUST 21, 1980 MEETING

W3AJF (XYL) Lucy B. Deacon, Phila., Pa.

WB2SZK (XYL) Della Bynum, Berlin, N.J.

W3CL (XYL) Sylvia Stein, Glenside, Pa.

W3IIT (XYL) Rose Brown, Norristown, Pa.

N3MW (XYL) Barbara Craft, Lansdale, Pa.

WA3NFV (XYL) Lucy Mitten, Trumbauersville, Pa.

K3GAS (XYL) Loretta Cutler, Elkins Park, Pa.

VE7BUT/W2 Richard Chalk, Cherry Hill, N.J.

K3MXM (XYL) Peggy Cohen, Elkins Park, Pa.

WB3LNZ, "Red" Thompson, Jr., Fairless Hills, Pa.

WA3AXV (XYL) Lynne Whitsel, Churchville, Pa.

* * *

VOTED TO MEMBERSHIP

VE7BUT/W2 - Richard Chalk, XYL - Geraldine
1976 N. Birchwood Park Drive
Cherry Hill, N.J. 08003
609-424-0894

APPLICATION FOR MEMBERSHIP

WB3LNZ - Emil T. (Red) Thompson, Jr.
XYL, Patricia
417 Chelsea Road
Fairless Hills, Pa. 19030
215-547-3593/215-736-1710

CHANGE OF ADDRESS:

N3EG, Earl Garber
318 S. 40th St., Apt. 3
Phila., Pa. 19104 215-387-1044

NEW PRODUCTS OF INTEREST TO HAMS

By Lyn, W3NSI

1. HEAVY DUTY ANTENNA ROTATOR: Telex-Hygain now has their new HDR300 rotator on the market. This unit features digital readout on the control console, brake, and is rated at 25 sq. feet antenna, weighing up to 500 pounds. Standard 8 conductor control cable is used. Price: \$399. 8601 Northeast Highway Six, Lincoln, NE. 68505
2. WINCHARGER GENERATOR: Prairie Sun and Wind Co. is selling the 200 watt Wincharger 12 VDC wind driven generator. This unit qualifies for the federal tax credit if used on your principal residence. At rated output into a battery P.S. unit, this unit would provide 15-17 amps for charging the 12 battery. Generator is available with or without a 10' tower, and can be supplied with automatic voltage regulation. It may also be mounted in a Rohn 25 G tower for greater height above ground. Price: \$525 (tower \$70-Volt Reg. \$65) 4408 62nd St., Lubbock, Tx. 79414
3. DENTRON MONOBANDER CW SSB T/R: The new HF series of single band rigs should be available as this is printed. Units are rated at 200 watts input and also cover RTTY and SSTV modes of operation. Size is 4" high-10" wide and 15" deep. Rigs are available for 10 meters through 160 inclusive; the HF30 covering the 10 MHz band soon to be in ham use. Frequency readout is digital, and receiver features incremental tuning. Dentron Radio Co., 1605 Commerce Dr., Stow, Ohio 44224.

* * *

VHF/UHF REPORT

By Joe, W2EIF

The six meter band seems quiet every time that I listen to it. However, K3ACR, claims that the band has been very good this Summer.

The other bands have not been any better due to lowered activity. Don't hear too many our Packrats on the band either.

The UHF Contest was fair. It did not enjoy good conditions for the most part and activity seemed to be lower than last year.

The use of FM on 223.5 and the prohibition of FM on 432 does not make any sense. How about prohibiting FM entirely and upping the points for contacts on the low end of 220?

Let us hope that the September QSO Party will enjoy the excellent conditions that existed last year!

* * *

THOUGHTS ON THE VHF/UHF CONTESTS

De K3IUUV, Bert

Following the recent UHF Contest, two ideas occurred to me which I would urge the readers to consider. The first item concerns the low number of contacts made from the Phila. area on the east-west path. Since we know that there are many active VHF'ers in Ohio and further West, I don't think it can be blamed on the activity level. Rather, I suggest it is caused by the combination of saturation level local signals and primarily our tendency to align the antennas on the NE/SW path. This antenna alignment comes naturally due to the large population and section numbers available in the New England area.

To encourage more contacts, I suggest we try to set designated times when the east coast group will plan to beam west. For lack of any other constraint, I would offer the odd half hours (7:30, 9:30, etc.) as suitable times to try the east-west path. Discussions with K8WW confirm that the midwest stations tire of waiting for us to beam west and know that we generally don't until near the end of the contests.

The second item is briefer, but more obvious. There is more spectrum on all of our bands than the 20 or 30 KHz that we use during the contests. Spreading out will reduce the QRM, overload, desensing, etc. with no state-of-the-art technological improvement needed.

If anybody else agrees, look for me in the Sept. QSO party on the E-W party at the odd half hours, and down between 432.0 and 432.1 MHz. 73, Bert, K3IUUV

UPDATE ON THE RANDY BYNUM AFFAIR

A brief was filed with the New Jersey Appellate Court on July 24, 1980. There has been extensive liason between Randy Bynum's attorney and ARRL's Bob Booth. The brief, if successful, will overturn the ruling of the Superior Court of New Jersey; let's hope so. We keep our readers advised.

The following letter should be interesting reading:

Harry B. Stein, W3CL
2087 Parkdale Ave.
Glenside, Pa. 19038

July 19, 1980

Re: Randy Bynum Defense Fund

Dear Harry:

This will not be the largest gift received, but it will probably be one of the more traveled. I have had an emotional reaction to HR Report's June 27, 1980, account of the matter. This is my 25th year in amateur radio and the worst were 1969-1971 spent in a north Jersey town which sounds very much like Winslow Township. The TV salesman in that town was one of its "leading" citizens. It was his common practice at that time to sell \$600 color console television sets to town residents, plop "rabbit ears" on top of them and convince them that the snow which passed for a picture was optimum reception from New York City stations. This, in spite of the fact that we were 40 miles from the signal source, had hilly terrain in between, and many houses were encased in aluminum siding. Problems of front-end overloading were incredible when one tried to transmit an amateur radio signal. I happened to have an elderly disabled neighbor who couldn't sleep and watched TV about 20 hours a day. When I conversed with this TV salesman about the problem, he made his position clear: there is no compatibility between TV and amateur radio: there should be no amateur radio in that community which is why he never got a license. Because I was a clergyman in that community and attempting to be a public servant, I decided that in spite of my legal rights, it would be better to "cool it". I found that I could safely run 40 watts on 80 meters and confined myself to 80 c.w., but I shed no tears when I left that community for many reasons.

Had I pressed my rights in that town, the climate was right for the same scenario to unfold as has unfolded in Winslow Township. So I hope my small contribution will aid in the rightful defense of WB2SZK.

I might add that since January, 1980, I am a Bible School teacher here. Radio amateurs working at the American Embassy in Yaounde tell me that they have been flatly refused permission to operate. I'm biding my time until I have the occasion to go to Yaounde myself to inquire. By that time I hope to have letters of character reference from the sous-prefet and commissaire special of this town. In the meantime, I am an active SWL on 15-20-40 meters 0530-0600 GMT.

73, Kurt Meyers (Pasteur), W8IQ
B.P. 6
Garoua Boulai, Cameroun

* * *

ARRL BULLETIN NR 85 FROM ARRL HEADQUARTERS NEWINGTON CT AUGUST 21, 1980 TO ALL RADIO AMATEURS
BT: Jan King, W3GEY was awarded the coveted John C. Chambers Memorial Award at the Central States VHF Societys 14th Annual Conference last weekend in Colorado Springs, CO. Presentation was made by Carl Smith, W0BWJ, ARRL First Vice President. The award was for Kings outstanding contribution to the OSCAR satellite program. Jan, the AMSAT Vice President of Engineering, accepted the award on behalf of all who worked with him on Amateur Radio satellite projects. AR

* * *

SPACE FILLERS
By Lee, K3MXM

Greens are good for you, especially five, tens and twenties....
If someone offers you the world on a silver platter, take the platter.
LECTURE - Something that makes you feel dumb on one end and numb on the other..

SWAP SHOP

FOR SALE: Kenwood TS520 - Mint \$450.
KDK 2016A 2M-FM + 5 amp supply \$300.
Kenwood TS600 - 6M all mode, mint +
DX-3 \$450. Kenwood TS 700SP - 2 M
all mode digital \$450. Janel QSA 6 in-
line 6M preamp \$25. Standard 146A 2M HT
+ TT pad + rubber ducky + charger \$125.

CONTACT: Don, WB3CDE
Phone: 215-847-5065

FOR SALE: Rohn #6 top section with
roof mount legs \$8.

CONTACT: Walt, WA3AQA
Phone: 215-887-9517 after 6 PM

FOR SALE: Pet computer - 8K Ram with tape unit.
Complete - less than 6 months old \$550.

CONTACT: Ed Morgan, N2AQJ
Phone: 609-386-5865

FOR SALE: RBM Navy receiver w/ps (2-20 Mhz)
Philmore xmtr - 2 tube xtal control w/p.s.
Complete 220 Mhz station; R-48 rcvr. w/pre-amp;
xmtr and p.s. mic.+ modulator. A second R-48
receiver also. Box of tubes - some ancient
vintage. All items located at K3GAS QTH.

CONTACT: John Tate, K3KTY
Phone: 215-673-8840

* * *

EXCLUSIVE TO CHEESE-BITS

CONTACT:

Miss Barbara Diamond
6769-18 El Cajon Boulevard
San Diego, California 92115
(714) 466-8702

Miss Barbara Diamond, daughter of Mrs. Pearl Diamond of New York City, New York and Mr. Harold D. Diamond of Van Nuys, California was married to Mr. Howard Weinstein, K3HW/6, son of Mr. and Mrs. Norman Weinstein, of Melrose Park, Philadelphia, on Sunday June 29th in San Diego, California at Congregation Beth Tefilah. Rabbi Samuel Penner officiated.

Mrs. Weinstein has worked for the San Diego Unified School District for seven years. Her husband, is a communications specialist aboard the U.S. Navy's deepest diving submarine, U.S.S. Dolphin (AGSS-555), home-ported at Naval Ocean Systems Center, Point Loma, San Diego, California.

* * *

TID BITS

The following Pack-Rats participated in the recent UHF Contest (Aug. 2&3). WA1NGR/M3, WA2DPU, W2EIF, WB2SZK, N3AHI, WA3AXV, W3CL, W3CXU/2, W3HQT, W3HFY, K3IUV, WA3HIT, WA3JUF, K3KTY, N3MW, K3QQ, K3VYG. (Did I leave anyone out?)

W3AYJ, Al Schnipper did an FB PR Job for Ham Radio in general and "Kosher Hams" in particular, with a number of informative articles in the local Philadelphia press.

We are saddened to report the death of a Philmonter George Weed, W3KN, He was a great gent and will be missed.

W2AXU, our Sun observer, reports the smooth number for November 1979 was 163.

The "Lick and Stick" operation at the QTH of WA3AXV was a fun affair. The mailing of 1500 or so HAMARAMA Flyers progressed smoothly with the following in attendance: WA3AXV, W3CL, WA2DPU, K3GAS, K3MXM and his son Larry, K3NHX, WB2VLA, WA3YUE, and W3ZD. The chore was topped off by an FB lunch prepared by hostess Lynne Whitsel.

W0RSJ, Bill Murphy is in the area for the next few weeks visiting his parents who are on the sick list. We wish them a speedy recovery. Bill also reports, since moving out to Dodge City, he has managed to "gun down" 40 states on 2 meters... good show OM.

14th ANNUAL CENTRAL STATES VHF SOCIETY CONFERENCE

By Jack Power, W2AXU

The 14th Central States VHF Society Conference was held in Colorado Springs, CO on August 15,16,17, 1980. Approximately 160 participants were registered, many with their families.

The conference was held in a Holiday Inn motel on the northern edge of the city and within view of Pike's Peak. About six miles North was the Air Force Academy and it was visited by many from the Conference. There are many interesting sights to see and places to visit. The family program was well organized by the local girls, most of whom were also licensed amateurs.

The Conference was opened by Doug Maloney, WBØMHP, the Conference Chairman. Following Doug was an old friend of many of us in the East, W6XJ, Gary Frey. He always has something interesting to talk about and this time was no exception. Gary discussed Solid State Noise Sources and Filters. Gary's noise source is generated from a 5-12V Zener diode and produces a noise output of about +35dB from 4 to 600 MHz. The high frequency end being limited by the diode capacitance.

The filters Gary discussed are most unique by their simplicity, consisting of only coils plus a piece of special circuit board known as EPSILAM - 10 produced by 3-M. It is only 1 inch by 4 inches in size and will easily handle 2KW PEP on six meters. The filter is a low pass type with cut-off frequency at 60 MHz. The filter is of a size that can easily be included within the amplifier.

Jan King, W3GEY, and Tom Clark, W3IWI, discussed AMSAT and its future plans in the wake of the disaster which befell Oscar 9.

Mike Stahl, W6MYC, discussed antennas in general and satellite reception antennas and feeds in particular. There was supposed to be an Antenna Discussion Panel with W6MYC and K1WHS participating but K1WHS didn't make the conference.

The afternoon and evening consisted of the Antenna measuring and the noise figure measuring. The antenna measuring was rained upon pretty heavily and at the moment I am not sure whether any antennas were measured. The noise figure measuring produced some low noise figures: 0.25 dB on 144 MHz, 0.3dB on 220 MHz, 0.4 dB on 432 MHz and 0.45 dB on 1296 MHz. I don't know at the moment the devices which produced these low NF numbers, but perhaps at a later time I can report on them.

Saturday morning arrived with an interesting discussion of GAS FET devices for receiving by Barry Hampton of DEXCEL, INC. The device he was discussing is the D432 with a typical NF at 4 GHz of 1.8 dB. The cost of the device is \$25.00 in small quantities.

Jan King, W3GEY, discussed the AMSAT EURO SAT to be launched on a reliable Delta rocket about Sept. 18, 1981. It is principally a data satellite collecting upper atmosphere information. Its output will be in the 145 MHz satellite band and it will have H.F. and S.H.F. beacons.

A most interesting discussion of VHF/UHF Tropo-ducting was held by K9AKS and W3EP. This talk dealt with upper air temperature anomalies which produce ducts - or wave guides, if you will - which will propagate VHF/UHF radio signals great distances, such as over the Pacific Ocean from Hawaii to the mainland U.S. However, their discussion was concerned with ducting over middle America.

Following lunch on Saturday, a very interesting talk on the VLA-Very Large Array-Radio Telescope located in the desert near Socorro, New Mexico. It consists of 28 dish antennas each 85 feet in diameter, configured in a "Y" and remotely controlled. The resolution of this radio telescope is better than the largest optical telescope.

A discussion of a 140 to 225 MHz broadband amplifier and the techniques thereof and a CSVHFS business meeting rounded out the afternoon. It was announced at the business meeting that next year's conference will be held in Sioux Falls, S. Dakota on July 31, August 1 and 2, 1981. The dates are two weeks earlier than in the past.

The banquet was well attended by 210 persons. Jan King, W3GEY, was presented with the Chambers Award for his many contributions to VHF amateur radio through his work with AMSAT and the Oscar program. Jan accepted the award with humility, stating that if it weren't for the many in the Oscar program, it wouldn't go. He thanked and praised his many co-workers.

(CONTINUED ON PAGE 9)

14th ANNUAL CENTRAL STATES VHF SOCIETY CONFERENCE
CONTINUED

Sunday morning concluded the Conference with a very interesting discussion concerning cosmic noise and EME, many very interesting EME system slides and a spectrum analysis of converters and transverters showing the spurious signals that are generated within the units. HORRORS!

In all, the Conference was well attended and well organized. It is great to see and visit with our many friends which we see only once a year, such as Mel Wilson, Gary Frey, Bill Murphy, etc., etc., etc.....

I was disappointed in not having any talks and discussions of radio propagation, particularly of the unusual kind that has been experienced on the 50 MHz band of late. Many experts were only two hours away in Boulder. Maybe they don't want to commit themselves. I hope we can have a propagation discussion next year in Sioux Falls. See you all there.

J.B. Power, W2AXU

* * *

Sunspot Cycle No. 21:

The Zurich monthly (Rz) Sunspot number for July, 1980 is 135.0. The Zurich 13 month smoothed number for Cycle 21 for December 1979 is 165.

This cycle is the second highest on record. It is my considered opinion that December 1979 will be considered the peak month of this cycle with the S.S.No. of 165.

It is also interesting to note that it has been announced that Zurich will no longer keep Sunspot numbers after December, 1980. This decision appears to be because of budgetary cuts.

(Sunspot Cycle No. 21)

The American Association of Variable Star Observers (AAVSO) will continue to report the American Sunspot Number (Ra). This smoothed number for December 1979 is 152.

For those that are looking forward to great things happening in the Fall of 1980, please compare the following numbers. 1980 are predicted numbers.

MONTH	Rz SMOOTHED		Rs SMOOTHED *	
	1979	1980	1979	1980
Sep	157	145	144	137
Oct.	158	144	145	136
Nov.	163	143	149	134
Dec.	165	142	152	133

* Rs is a relative sunspot number computed directly from Sa - the Ottawa daily solar flux value at 2800 MHz adjusted for 1 Astronomical Unit (IAU).

J.B. Power, W2AXU
8/24/79

* * *

MORE SPACE FILLERS
by Lee K3MXX

There must be intelligent life on Mars. You don't see them spending 30 billion dollars to find out if there is life on Earth..

The reason the sea is so salty is because billions of herring live there..

Of the 50 States in the United States, 21 of them end in the letter "a". Can you name these 21

* * *

HURRICANE ALLEN FINALLY blew itself out on the South Texas coast last weekend, after leaving death and destruction along its 2500-mile course, but Amateur Radio stayed with it all the way. During Allen's week-long journey, the dedicated Amateurs of the Hurricane Watch Net gave the Weather Bureau's Hurricane Center in Miami perhaps the best continuous rundown of a tropical storm's progress it's ever had. The Hurricane Center Amateur crew, led by WD4JNS, took reports directly from the net on 14325, while other storm-related information from other bands was passed in on 2 meters.

One particularly Dramatic Contact came Saturday evening, when Chief Forecaster Dr. Richard Hagen of the Brownsville Weather Bureau used WD5CLD to confer at length with Miami hurricane specialist Dr. Joseph Pelissiar, on WD4JNS/4, about the significance of Allen's having stopped 30 miles off Brownsville.

Some Of The More Active contributors to the Hurricane net not already cited were HH2MC, HH2BM/HH6, 6Y5RS, WB2OYL/6Y5, ZF1BC, ZF1MA, ZF2AT, CO2KK, KP4USN, XE3A, XE3CT, XE3LK, VP1JJ, and KØIND/4 in Key West. Amateur Radio's contribution during one of this century's strongest hurricanes received widespread recognition in the media. NBC showed the Hurricane Center's Amateur station in operation on its Saturday night news, while W4ZR made TV news on Wednesday getting from-the-scene damage reports from HH2MC and 6Y5RS on 20 meters. Similar scenes were repeated across the country, as TV news teams found that local Amateur stations gave their storm coverage an immediacy not otherwise available.

Intentional Interference Was the only negative aspect of what was otherwise an outstanding Amateur operation. Carriers, VFO swishing, and even some music interfered with net operations at times, though relays from net stations outside the interferer's skip zone minimized the problem. At least one of the jammers, whose life-threatening behavior is beyond understanding, supposedly has been identified and will be charged shortly.

A NEW 10 GHZ DX RECORD, 757 km, was set July 12 when IØSNY/7 worked IW3EHQ/3 and I3SOY/3. Ten milliwatt Gunnplexers and one-meter dishes were used at both ends, from Brindisi on the south end to Col Visentin in the Italian Alps on the north. The former 10-GHZ record, 633 km, was also held by Italians. Thanks W1CF.

A New Meteor Scatter Record is reported to have been established Monday night, when VE1ASJ worked England during the Perseid meteor shower. No further details were available at press time.

HAM RADIO MAGAZINE'S NEW EDITOR is Alf Wilson, W6NIF, who had joined the staff temporarily earlier this Summer as technical editor. Alf, who'd long been one of Ham Radio's principal assistant editors under former Editor-in-Chief W1HR, had come to New Hampshire just to help out in the difficult period following Jim's death in April. Happily for Ham Radio, he's now decided that he likes both the job and New Hampshire well enough to stay on.

Concurrently, Tom McMullen, W1SL, has been named editor of Ham Radio Horizons. Tom was promoted from managing editor in recognition of his fine work in the recent redirection of Ham Radio Horizons toward the mainstream of Amateur Radio.

EDNA BOOTH, WIFE OF ARRL General Council Bob Booth, W3PS, died last week following a long illness. A memorial service will be held at 8 p.m., August 18, at St. Marks United Presbyterian Church in Rockville, Maryland. In lieu of flowers, contributions may be made to the Edna H. Booth Memorial Fund, in care of St. Marks Church, 10701 Old Georgetown Road, Rockville, Maryland 20852. (The Pack-Rats extend their condolences to Bob Booth)

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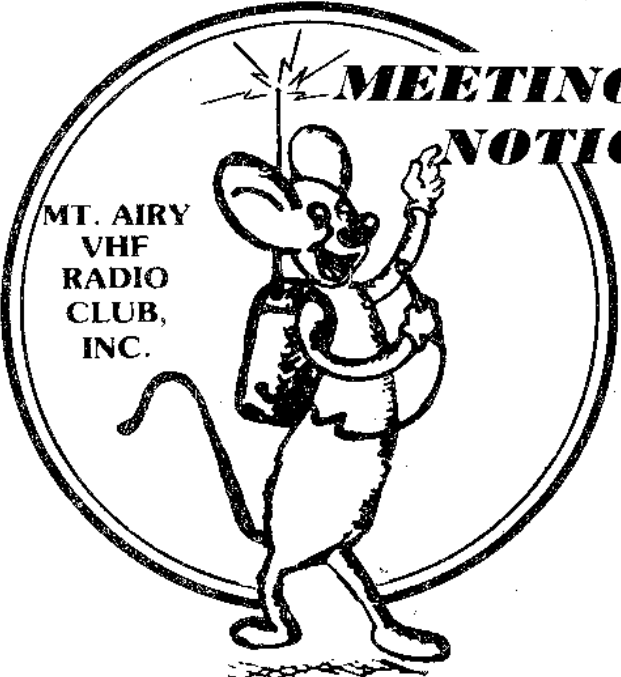
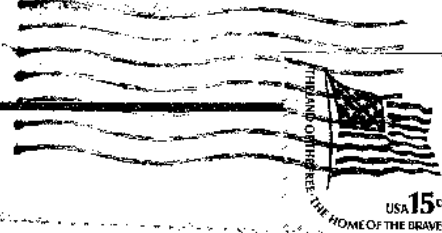
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