

PACK RATS'



PACK RATS

CLUB CALL: W3CCX

MT. AIRY VHF RADIO CLUB, INC.

CHEESE BITS



MT. AIRY VHF RADIO CLUB, INC., PHILADELPHIA, PENNSYLVANIA ARNS
 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

VOLUME XXVI

AUGUST, 1985

NUMBER 8

THE PREZ SEZ

Those that attended Ladies Nite were treated to a fine evening once again. Thanks go out to Doc, K3GAS and all that participated in this event. 'Mother Rat', Helen Brick, was in attendance to keep us all in line. We wish to congratulate Dave Power, WB2VLA for receiving the Pack Rat of The Year Award, Rich, WB2NPE and Bob, N2SB for being 1985 January Sweepstakes Co-Chairmen. Awards were also presented to Dave Mascaro, WA3JUF and Dave Hackford, N3CX and Doc Cutler, K3GAS for their technical contributions plus Home Brew Nite. Awards were also presented for the January Sweepstakes. Congratulations to all for a job well done. Doc surprised us all by adding a little magic to the evening. Bill Veloric, the magician, displayed his prestidigitiaon for us all. Where did that bird go???

The first outdoor meeting of the year was held at Zimmermans' Glen, hosted by Dave, W3ZD. Some interesting items were auctioned off, in addition to the usual White Elephants and boat anchors. As always, Dave inherited some new lawn ornaments.

On August 3rd and 4th the Pack Rats will again venture their assault on "The Knob". W3CCX/8 will be operating from Spruce Knob, West Virginia (FM08), on 220, 432, 1296 and 10 GHz. Those having these station capabilities turn your beams Southwest and give us a holler. The participants are as follows: N3AOG, WA3AXV, N3CX, WB3DNI, K2EVW, W3HQT, WA3JUF, WB2NPE, WA3NUF, AK30, WB2RVX and N2SB.

73, Mike, WB2RVX

* * *

1985 ESTES PARK 1296/2304 CONFERENCE

The Conference will be held on Thursday 19 September 1985 until Sunday 22 September 1985 at the Holiday Inn, Estes Park, Colorado. Get in touch with Don Hilliard, W0PW - P.O. Box 563, Boulder, CO 80306, For details. Note: W3CL has a registration form and schedule of events for those interested.

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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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609-783-9478


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W3CL, HARRY B. STEIN

<u>MONDAY NIGHT NETS</u>	<u>NET CONTROL</u>
7:30 PM - 50.125 MHZ	W3CL
8:00 PM - 144.150 MHZ	W2EIF
8:30 PM - 222.98/224.58 MHZ	K3GAS
8:45 PM - 220.125 MHZ	KS2T
9:00 PM - 432.110 MHZ	K3IUU/K1PXE
9:30 PM - 1296.1 MHZ	- - -

PACK RAT REPEATER 222.98/224.58 MHZ/ W3CCX
LOCATED IN CHURCHVILLE, PA.

OFFICERS: 1985-1986

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VICE-PRES: WA2OMY, GARY HITCHNER
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REC.SECY : W3NSI, LYN ROWLAND
TREASURER: K3GAS, DOC CUTLER
DIRECTORS: WB2VLA, DAVE POWER (EX-OF)
N3CX, DAVE HACKFORD (2 Yrs)
WA3JUF, DAVE MASCARO (2 Yrs)
WA3AAJ, JIM WARD (1 Yr)
WB3IND, GEORGE McMAHON (1 Yr)



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CALENDAR OF COMING EVENTS
Syllabus by Lee, K3MXM

AUGUST

- 1 Those lazy, hazy days are here....
- 3-4 ARRL UHF Contest - 1800 UTC Saturday until 1800 UTC Sunday. Amateur frequencies above 220 Mhz - all authorized modes of operation. Exchange - grid square locator. See July issue QST, Page 78 for details.
- 6 Atomic Bomb dropped on Hiroshima 1945
- 10 Saturday, 10 AM, Board of Directors Meeting, QTH: KS2T, Jay Miller, 527 Woodview Road, Toms River, N.J. Directors and interested members always welcomed.
- 11 MARC Hamfest - Bucks County Drive In Theater, Warrington, Pa. Rte. 611. A good local hamfest and the .06 gang deserves our support.
- 15 General Club Meeting - 2nd outdoor meeting of the season. Ladies Welcome, Nostalgia Nite, Come early. A new location this year. QTH: WB2VLA, Dave Power, 25 Van Duyn Drive, Ewing Township, N.J. He will monitor Pack-Rat Repeater. A good fun evening, take the XYL out for supper and then come to the meeting.
- 17 Ham and Chip Flea Market - LaSalle College, 20th and Olney Avenues, Phila, Pa. Sponsored by the Phila. Area Computer Society (PACS).
- 17 Ramapo MT. ARC Hamfest, American Legion Hall, 65 Oak Street, Oakland, N.J. Talk-in 147.49/146.49
- 20 For all you with blood of blue this is your date in history. The Mayflower sailed from England in 1620.
- 24 Finger Lake Hamfest, Trumansburg, N.Y.
- 25 Gloucester County ARC Hamfest, Gloucester County Community College, Sewell, N.J. A good Hamfest will a lot of side activities, Ladies Activities, VEC Testing, Seminars and mfg. displays. Special transportation from Deptford Mall at 10:00, 12:00 and 2:00 P.M.
- 25 Hershey Pennsylvania Hamfest

* * *

SOME SPACE FILLERS BY LEE, K3MXM

Now that the Hamfest season is in full swing, here are the 7 laws of Hamfests de World Radio 5/85 and W3GXX:

1. You will buy something that does not work.
2. You will buy something that you do not need.
3. You will sell something you will need later.
4. You will see something at 5 hamfests, but you will not find it at the 6th one, when you need it.
5. If you do buy something you need, and if it works, you will call it a good hamfest.
6. After you buy something, you will find it cheaper at two other places.
7. You will buy something you need, but only to find out that you do not need it anymore.

* * *

CHANGE OF ADDRESS

NF2L, William Smith
2605 Fenimore Road, RD-1, Box 371F
Medford, N.J. 08055 Phone: 609-267-2461

Dear *Dave*,

The attached information concerning the forthcoming 144 MHz transatlantic tests by EI2VUI (GRID SQUARE IO-53) was obtained from the West Kent Amateur Radio Society during a recent business trip I made to the UK. Please assist me in giving it the widest possible dissemination to interested VHF amateurs along the US East Coast. Unfortunately, I obtained the information too late to appear in the August edition of QST magazine, so direct mailing and depending on each of you to spread the word in the only way to get the information out. If you have access to local amateur media with a publication date prior to the scheduled test, do not hesitate to reproduce the attached information as provided. In addition, may I encourage you to disseminate the information on established VHF and UHF nets such as the Pack Rats or the East Coast 70 cm net.

In addition to the information provided in the attached, the West Kent Amateur Radio Society will have equipment to listen on 50.080 MHz and 220.080 MHz to facilitate possible crossband operation either to HF or 144MHz. I recently delivered a 220 MHz converter provided by Bill Seabreeze, W3IY/4 and a low noise 220 MHz preamplifier. The operation on 50 MHz and 220 MHz will be receive only due to television and military usage of these frequencies in the Republic of Eire.

The presence of double hop "E" propagation during the tests would allow this first-ever transatlantic terrestrial QSO. The distances are roughly similiar to establishing contact with Arizona and New Mexico on 144 MHz from Eastern Pennsylvania, a feat that has already been accomplished; further, the great circle path between Eire and the US East Coast is actually more north to south than it is east to west.

Please send a QSL card to the West Kent Amateur Radio Society, C/O Mr. Nigel Peacock, G4KIU, 64 Cleveland, Tunbridge Wells, Kent, England, TN2 3NH with the information solicited on their information sheet. Also, have others that you contact do the same to facilitate determination of beam hearings. Nigel's phone in the UK is (44) 892 33586. Also send me a QSL with the same info for hand delivery.

If I can provide any further information, please call me at (301) 535-3590 in the evening. I hope to make at least one more trip to the UK before the scheduled tests and would be glad to deliver any messages or relate any of your desires to the Society. Of special interest to the West Kent Society would be a listing of 50, 144, and 220 MHz beacons in existance, their frequencies and identifier. I have already provided this data for the Johns Hopkins APL 144MHz and Woodbridge Wireless 220 MHz beacons in the Washington DC area. Please provide any information you have on other VHF beacons with your QSL's.

(EDITORS NOTE: THIS INFO RECEIVED FROM N3CX - TNX DAVE)

Good luck and 73,



Harry J. Price. K3HZO

WEST KENT AMATEUR RADIO SOCIETY

A total of 11 members of the Society will be travelling to Eire with the intention of establishing a contact with North America on 144 Mhz by direct propagation, ie not eme.

The operating and HF talkback frequencies are as follows:

V.H.F.

- 1) SSB/Amtor 144.160
- 2) CW 144.080

H.F.

C.W.	S.S.B. Primary	S.S.B. Secondary
28.080	28.660	-
21.080	21.160	21.260
14.080	14.160	14.260
7.015	7.060	-
3.580	3.760	-

ALL FREQUENCIES +/- QRM

Dates and times of operation

Monday	19	August	Tests, no specific skeds
Tuesday	20		24 hours
Wednesday	21		24 hours
Thursday	22		24 hours
Friday	23		24 hours
Saturday	24		Specific skeds only
Sunday	25		Specific skeds only
Monday	26		Specific skeds only
Tuesday	27		Specific skeds only
Wednesday	28		Specific skeds only
Thursday	29		0000 - 1100

Type of operation

We are able to operate on CW, SSB, MS and Amtor. For the first 15 mins of each hour, our beam will be turned towards Europe.

For the rest of the 45 mins operation is intended as follows on CW:

0 - 15 mins	Europe
15 - 20 mins	Eire calls you and listens
20 - 25 mins	You call Eire and listen
25 - 30 mins	Eire calls you and listens
35 - 40 mins	You call Eire and listen
40 - 45 mins	Eire calls you and listens
45 - 50 mins	You call Eire and listen
50 - 55 mins	Eire call you and listen
55 - 00 mins	You call Eire and listen

It is suggested that the timing within each 5 min segment is that the calling station calls for 30 seconds and listens for 15 seconds and then repeats. Accurate clocks will be essential.

We intend to try and have talkback on H.F. wherever possible to assist with the operation.

Callsigns in Eire

Our 2m callsign will be EI2VUI

On HF talkback callsigns will vary depending on the operator and will be EI2VTQ/VUJ/VUK/VUL/VUM/VUN

H.F. Skeds (THIS INFO RECEIVED TO LATE TO MAKE THE JULY ISSUE OF CHEESE-BITS)

Although conditions may be difficult, we want to try some H.F. skeds on three Sunday's to discuss arrangements with you and those interested in working us. The sked times are as follows:

30 June	14 July	21 July
Frequencies - 14.160 & 21.160 SSB		
Time 1500 - 1600 GMT		

In case one band is open and the other not, we will call on 14.160 from 1500-1515 and if unsuccessful move to 21.160 from 1515-1530. If still without success, back to 14.160 from 1530-1545 and finally 1545-1600 on 21.160.

Our UK callsigns are G3WKS (Club Call) G4RFQ (Tony) G4OTV (Dave) G4FDC (Alex) G4MXL (Brian) G4UPI (Jane) G4BIA (Roger) G4KIU (Nigel) G8ZXC (Jim) plus expedition members Carol, Corrinne & Paul.

Stations with whom we are currently in contact:

K3HZQ (Stateside co-ordinator) WA1OUB VE2GAG AK4L/VE1RM
K1WHS W1JR K2UYH K1MNS a station in KP4(!) and a whole host more who we know want to try and work us but who WE don't know by callsign.

If you know any suitably equipped station who is intending to try and call us, please let us know so that specific skeds can be arranged.

Our location:

We will be setting up the station 1500ft ASL on the top of a mountain close to Galway Bay in Eire. This is (we hope) the most suitable location in Eire at - 53 degrees 04 mins North
9 degrees 14 mins West

Please let us know...

When you reply to us, please let us know the following:

1. Your exact latitude & longitude
2. Your town or nearest town from where you will operate
3. Details of times you will be available for skeds, indicating dates and times in GMT
4. Exactly which modes you can operate on 144Mhz
5. Details of your station equipment and antenna system
6. Anything else which you consider of importance and interest

SWAP SHOP

FOR SALE: Kenwood 830S - Instruction manual, service manual, spare tubes (12BY7 & 2-6146), shipping box. Excellent condition \$650.00.

CONTACT: W2AXU, Jack Power
102 Upper Ferry Road
Trenton, N.J. 08628
Phone: 609-882-8811

FOR SALE: MMT 144/28 \$115. 2-Telerex 2M814 W/phasing harness \$150, separate \$70, U pick up. NYE Viking MBII ant. tuner - handles 3000 watts, sell or trade \$125. 6 meter ringo- u pick up \$20; 2 - 20 ft. lengths of fibreglass reinforced plastic tubing - 1 1/2" dia. 1/4" wall, U pick up \$1.50 per ft.

WANTED: IC502A (Not IC502)

CONTACT: KS2T, Jay Miller
527 Woodview Road
Toms River, N.J. 08753
Phone: 201-244-7623

* * *

COMMERCIAL AD

1296 and 2304 Mhz Loop Yagis: 2196 45 element \$85. 2304 45 element, \$75. 2 way and 4 way power dividers and stacking frames available. Also element kits. Available soon 20 and 70 watt solid state linear amplifiers for 1296. Write for into: Bill Olson, W3HQT, Down East Microwave, Box 1655A RFD 1, Burnham, ME 04922
Phone: 207 - 948 - 3741

FOR SALE: (Complete station)

Icom IC-290A - 2M, FM/SSB, MEM, Scan Etc. 15 Wa. List Price \$549 - Sell Price \$290.
Icom HM-8, Tone pad mike - list Price \$50 Sell price \$25; YAESU FT 208R, 2M H/T - List Price \$319, Sell Price \$175; NC-8A Desk Charger 3 HP/15HR, List \$99, Sell \$60; FNB-2, Extra Batt List \$29, Sell \$10; 2@ LCC-8, Leather Case List \$35, Sell \$15; MMB-10, Mobile Brkt. List \$15, Sell \$5; PA-3, Mobile Cig, Ltr. Adaptor List \$39, Sell \$20; Tokyo Hi-Power HL-160V 2M Amp. 3-10 in/160 out List \$349, Sell \$250; Tokyo Hi Power HL-32V 2M amp 5-3in/30 out, List \$89, Sell \$45; KLM 2M amp 3 in/25 out List \$95, Sell \$45; Hustler G6-144B, 2M vertical antenna List \$119, Sell \$40; KLM 2M 14 elem. Beam List \$77, Sell \$35; Cushcraft 2M 11 Elem. beam, List \$64, Sell \$20; Telex Ham-IV rotator List \$310, Sell \$150; Connect Systems Private PatchII List \$429, Sell \$350. Total = \$1565, Total System Price \$1300.00.

CONTACT: Al Buono, WB3JSS

R.D. 5, Pt. Pleasant Pike
Doylestown, Pa. 18901
Phone: Day - 215-441-2801

Evening - 215-766-8272

ADD - YM 24A Speaker Mike List \$39, Sell \$20

FOR SALE: HUNDREDS OF TUBES FOR ALL APPLICATIONS.

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

THE CLIQUE IN THE CLUB
(An Editorial)

Word has been received by the officers of your club that it is run by a clique. Upon investigation we find this statement to be true. Furthermore, we find that this clique is composed of faithful members who are present at every meeting, who accept appointments to committees, who give willingly of their time, energies and efforts, and who sincerely believe that the more one puts into his club, the more he will get out of it. There is no question that the enthusiasm, responsibility and efforts of these members are of inestimable value to your club. And we would, therefore, suggest that you join this clique. It is not difficult to do so -- in fact it is very easy. Begin by attending meetings regularly, take a more lively interest in the club activities, make helpful, constructive suggestions, and accept responsibilities to serve on any committees. Show a continual interest in all affairs pertaining to your club. Before you realize it, you will become a member of the clique and you would be surprised to know how anxious they are to have you!

From the June 1955 Blurb

YORK ROAD RADIO CLUB NIGHT

In late May, Ron Cohen, K3ZKO called me on the land line to inform me he had a color film, taken in 1938-39, on the activities of the York Road Radio Club. The film belongs to Bob Sutter, W3SOB. The YRRC was founded in the early 1930's and drifted away in the 1960's. Harry Stein, W3CL and myself stopped in to see Ron to preview the film. We also took slides, supplied by Fred Hoffman, K3DEY, of the activities of the YRRC in 1958-60. We found them to be excellent and they should be shown to other interested hams. We required a place large enough to show them so I volunteered the Warminster Amateur Radio Club meeting room on our monthly meeting July 3. This date would also be OK for Bob, W3SOB as he would be up here that week from Florida.

K3ZKO, W3CL, K3DEY and myself, aided by an available YRRC roster of the 1950's, plus on the air contacts through the Pack Rats, Delmont, Phil-Mont and WARC Clubs invited anyone interested to attend the July 3 showing. The response was tremendous: 8 Pack Rats, 3 Delmont, 1 PARA, 1 Phil-Mont and 12 visitors with no club affiliation showed up. Total attendance was 83 of which 18 were identified as ex YRRC members.

All attendees were encouraged to "chime in" whenever they could identify anyone or for any humorous incidents. The audience participation was terrific. Both the slides and the film covered banquets, picnics, field days and individual ham stations. Field days haven't changed much except for larger and more bulky equipment, lack of beam antennas and old cars. Shots of individual stations showed mostly 6' relay racks which probably consisted of one, or a pair of, 210's with perhaps less than 100 watts input and virtually everything was home brew.

Everyone seemed to enjoy the evening -- great get-together for us old timers and I think the younger generation who probably never saw us old guys, with home brew rigs and our funny looking clothes enjoyed it also. We will have to do it again sometime.

Ed Plessner, W3ESH
WARC (ex YRRC)

* * *

1985 PACK-RAT AWARDS

Pack-Rat of the Year - WB2VLA, David Power

Mario Award for Technical Excellence - WA3JUF, David Mascaro

Dedicated Club Service - K3VYG, Gordon Vogt

Homebrew Best Design - WA3JUF, David Mascaro

Homebrew Most Unique - N3CX, David Hackford

Homebrew Electronic Fun - K3GAS, Doc Cutler

January VHF SS Awards as Follows: Contest Co-Chairman - WB2NPE - Rick Connor
Contest Co-Chairman - N2SB - Bob Cook

Single Operators: Number one (#1 Nationally) - WA3AXV, Ron Whitsel, Number two (#4 Nationally) W3HFY - Hal Grace; Number three (#8 Nationally) - WB3JYO, Paul Drexler, Honorable Mention (#9 Nationally) - WA3YUE, Bruce Loss.

Most Improved Score - K3GYS, Gus Nicolella

Multi-Operators: Number one (#2 Nationally) - N2SB (WB2NPE, WB2RVX, WB8ZAR, WA2VYA)

Number two (#3 Nationally) - WA2OMY (AA2Z)

Number three (#8 Nationally) - W3KKN (K3KMN)

A few awards were presented at the regular meeting in June and the rest at the Banquet and Ladies Nite on June 29th.

Last minute SWAP SHOP : FOR SALE:

* * *
HQ-170 Rcvr- \$125, B&K Dual Trace Scope, Model 1470, LN, \$225; Will trade Drake TR-6 and PS for 435 SSB Xcvr. CONTACT: Bill Moessner, K3WRO
Phone: 215-674-3892

Hi Harry!

A LETTER FROM W3HQT

July 7, 1985

Long time no hear. Have to admit my activity on the bands has declined a bit with Summer chores but I still try to check into the nets occasionally and have made the last few Sunday morning skeds on 75 meters. At least I've kept pretty much abreast of what is happening in Pack Rat land.

Made it on for most of the June contest and did O.K. with a little help from the aurora on 2 meters Sunday afternoon. Finished up with 79 QSO's in 31 grids on 2, 24 in 11 on 432, and 9 in 4 on 1296. 1296 was particularly exciting although conditions were not particularly good. Best DX was W2SZ/1 (of course) at a distance of around 240 miles. This is with a single loop yagi about 40 feet off the ground and below tree level in that direction. Hope to have the 100 foot tower up and some more antennas by the September contest, and hopefully, at that point I can at least think about working stations down in the Philadelphia area.

The antenna business is plodding along and I am in the process of building the "new expanded headquarters" for Down East Microwave out in the barn. This should make things a little easier when the orders start to roll in. The ad in Cheese Bits has been a real help and as a matter of fact, I just got an order from North Carolina that came from reading Cheese Bits - that paper really gets around! The best part of this business is talking to all the hams all over the country getting on 1296 and 2304. There really are a bunch of them.

I'm still planning to make it down for the Spruce Knob expedition, so hopefully I will talk to you then, if not we are definitely going to be at the Hamarama/VHF UHF Conference so see you then.

Enclosed is an updated ad for Cheese Bits and feel free to run all or part or none of this letter in the paper.

Sure miss everyone.....

73,

Bill

* * *

TID BITS

Sunspot No. for June 1985 = 24.2. Smoothed No. for Dec. 1984 = 21.1.

K3KTY continues sending weekly itinery reports from Florida. K3ACR worked John on 6 meter opening. The latest card was from Myakka City, Fl.

K3EOD, Al Boblitt was in a squeeze vehicle accident and came to the White Elephant Sale wearing a neck collar.

W3BRU, Bill Benner showed up at the sale meeting also. There were many other old friends other than Pack-Rats there also.

The Spruce Knob contingent adjourned to WA3AXV QTH to fabricate 2304 loop antennas. Johnie Allen, W3CXU joined them as a consultant!

Doc Cutler's (K3GAS) station wagon was destroyed by fire on the 309 Expressway on July 10th. He has replaced it with a shiny black wagon.

Gracie, XYL W3HK making progress in the therapy rehab unit, Rolling Hill Hospital, Elkins Park, Pa.

Hy Ecksel, WB3NDE making progress after heart by-pass surgery.

K3MXM, Lee Cohen spent a pleasant week-end at the shore. Using a regular walking cane to get around.

Congratulations to WA3AXV and WA3JUF on receiving 2304 MHz VUCC certificates numbers three and four respectively.

We wish Ed Braddock, W1XV, a speedy recovery from recent surgery.

Another old friend, W3AJS, Ed Keener, returned from a sojourn to England and then ten days with friends "down east" in USA. Made the White Elephant Sale in good shape.

K3JJZ, El Weisman, did a great job as auctioneer at the White Elephant Sale on Saturday, July 20th.

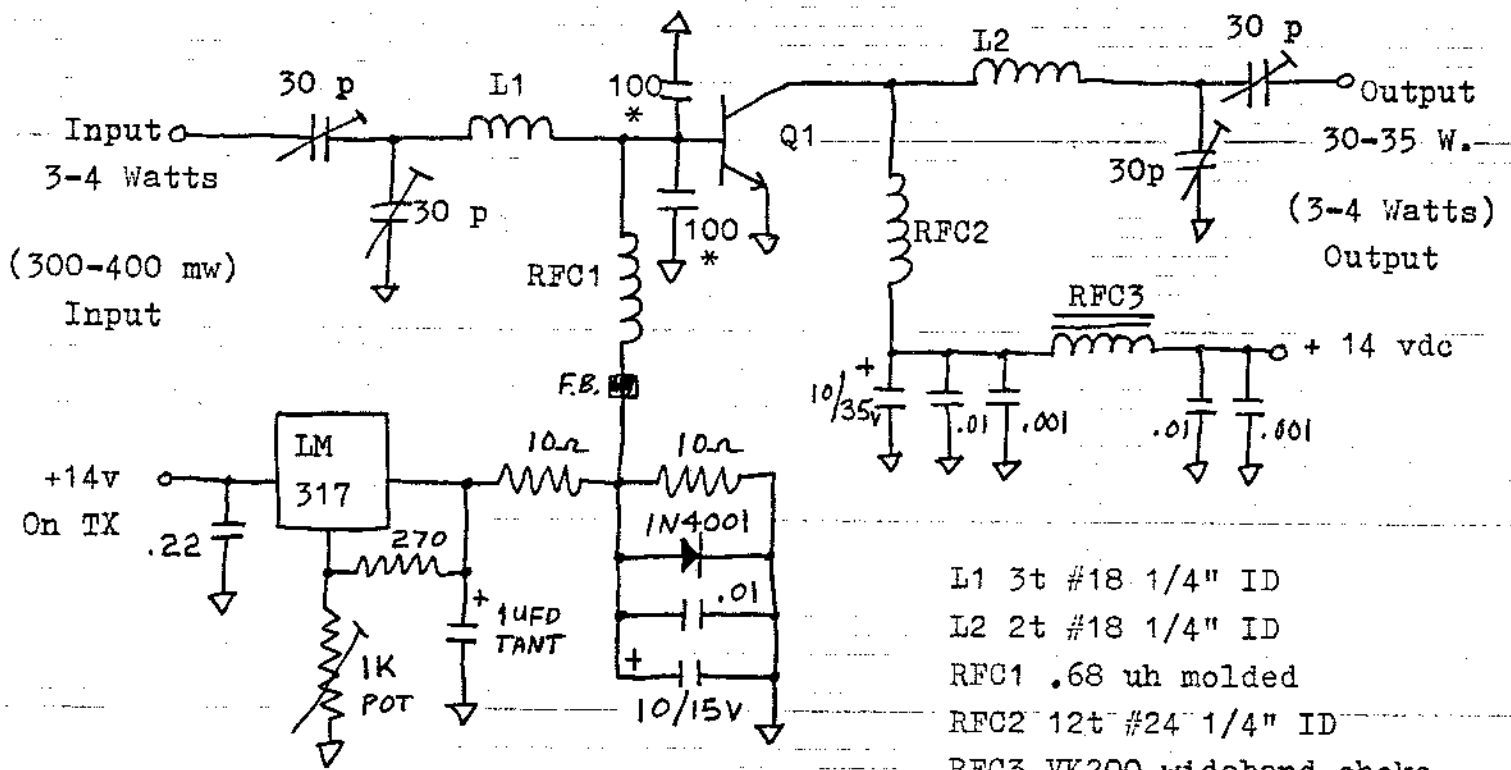
WB2IFC, Ken Birmingham, is now on 2 meters out of Chincoteague, VA. rare grid FM 27. He will be moving up to 432 in the near future.

* * *

144 Mhz. Linear Amplifier

by D. Mascaro, WA3JUF

The following amplifier will produce 30-35 Watts on 2 meters. It can be built into a box 2-1/2" wide and 4" long (Pamona 2901). Normal drive is 3-4 Watts, but 300-400 mw will produce 3-4 Watts as a driver in your 2 meter transverter system. Idling current is 100 ma. for the 30 watt amp. and 50 ma. for the 3 watt amp.

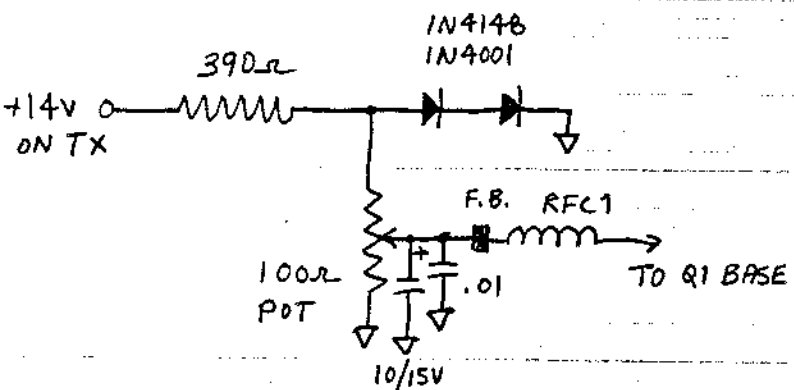


- L1 3t #18 1/4" ID
- L2 2t #18 1/4" ID
- RFC1 .68 uh molded
- RFC2 12t #24 1/4" ID
- RFC3 VK200 wideband choke
- Q1 SD1275
- SD1274

(The bias diode is thermally attached to Q1)

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