CENTRAL OKLAHOMA RADIO AMATEURS
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Number 206

The South Canadian Amateur Radio Society

Scars held the monthly meeting for March on the 14th at the Norman Red Cross. The meeting was called to order at 9:30 by president Don, KI5TP. After those in attendance introduced themselves the treasurers report was given by David, N5LCL, indicating that the account held $1787.77. Ken, N5KUK, filling in for WB5ULK read the minutes of the previous meeting from the *C&E*.

Don reported on the previous CORA meeting and noted that there was a *Ham Holiday* registration form in the March *C&E*. He will once again be running the flea market this year. Several manufacturers representatives will attend this year. Don noted that due to a conflict, the event will be in the Made in Oklahoma building. The dates are July 25th - 26th.

Steve, NI8W asked for club members to help with the 89er bicycle race to be held on the first weekend in May. He needs at least eight people but more would be better. Contact Steve if you can help.

Steve also announced that due to other commitments he would not be able to be the net coordinator for the spotter net station at the NWS although he would be able to operate the net on some occasions. Bill, N5SAL said he would coordinate the operation this year.

Don announced that a code class would be starting on the 2nd of April at the FAA Center on Oklahoma City. The first class will start at 6pm. See Don for further details.

Ken, N5BEW said that the power amplifier in the repeater had some failed transistors and was being repaired. It should be back in service in a few weeks.

As the meeting adjourned a door prize drawing was held for a gift certificate to the Oklahoma Comm Center. Several screwdrivers were also drawn for.

After the meeting was over, Bill Bunting, N5SAL, a meteorologist from the NWS office on Norman, provided storm spotter training for about 15 of the club members.

de Ken, N5KUK

Don't forget the Lawton Hamfest
which will be held Friday 11th.
at the Fairgrounds.
Admission $4.00.
Admission & swap table $8.00

Oklahoma City Autopatch Association

SILENT KEY

It is with much sadness and regret that the Oklahoma Autopatch Association advises of the recent death of one of our fellow members, RAY TORRES N5NIP. Please join with me in a moment of prayer for our good friend and his family.

73 es 88 Ray...u will be missed!!

Howdy! This is NJ1V. Didn't realize what was going on, and this month's deadline crept up on me again! With only two days left to go, I hope I can get out something worth reading in time for deadline.

OCAPA members Ruthie (N5RJM/KC6MM), Jim (WV5S/KC6SS) and Karen Hood, Craig (KB5BOB/KC6OO, and yours truly (KC6VV), plus other OKDXA members Coy (N5OK/KC6OK), Charlie (W0RRY/KC6RR), and Dave (N5CG/KC6GG) recently returned from our exciting adventure and DX-pedition to Palau. Hope the crew got a chance to work everyone that needed the Western Carolines. We will be putting together some DX-pedition notes to be included in a subsequent edition of the OKDXA Newsletter, and a slide presentation to be shown at one of our upcoming meetings.

In addition to the Palau bunch, another of our members, Hal KB1ZQ alias KG4HM just returned from a short stint in Guantanamo. The following from Mac K2GKK:

By the time you read this copy of C&E, Hal/KB1ZQ will be back home from an Air Force mission to Guantanamo Bay Navy Base in eastern Cuba. He took some of his ham gear with him and was able to do a LOT of hamming on 20, 15, and 10 meters with the call KG4HM which was issued to him by U.S. Navy authorities.

Hal had a bit of trouble with his antenna, so he did not get in as much operating as he had hoped. The mission was also complete much earlier than had been expected, so Hal was able to come home almost two months earlier than he had expected.

Even so, Hal logged around 3,000 QSOs during his mission to the Caribbean, even though he had to sandwich operational times between the duty requirements of his job. We hope you were able to work him while he was there. [Mac K2GKK]

Meeting News

This month I have the rare opportunity to report on the last two of our meetings.

On Tuesday February 18, we held our annual Severe Weather Net Meeting at Channel 9. This was my first opportunity to attend, and was I impressed with the program! For those of you not having a chance to make it, mark it on your calendars for next year!

With a crowd of over 150 in attendance, B.R. WA5BQX began the program by explaining the procedure involved in manning our station at Channel 9. B.R. was followed by Leonard W5MEL, who set o expectations as to what was required of the mobile spotters during the net, as well as other listeners.

For those of you that were in attendance, aren't you glad that Leonard wasn't your DI?

We were then presented with a great program by Gary England, Alan Mitchell, and other members of the Channel 9 News Team about severe weather, and the composition and cause of various severe weather patterns. We were also shown some pretty awesome videos of actual recent tornados in and around our local viewing area.

TNX to the Channel 9 guys, and to our own OCAPA members who devote so much of their time during our severe weather season.

Our March meeting took place at the regular place, Salvation Army HQ on Tuesday March 17. What a crowd! Our Prez KA5PSF Jim advises that there were 57 members and guests in attendance! Thanks for your

Continued page 2

participation!

The main discussion of the evening revolved around our upcoming Field Day activities in June. Our Field Day Chairman, Larry KF5JN introduced the possibility of an alternative site, Tinker AFB, for this year's Field Day. A straw vote by the members in attendance indicated that the preference again was the site at K5JI. Jay's in Piedmont.

Our Field Days are a blast, so make plans now to come out and join in the fun! We have BIG plans to move OCAPA up in the score standings this year, so Larry will be looking for alot of help for before, during, and after the exercise. Please volunteer to assist however you can. Everyone is welcome, including spouses, children, girl and boy friends, etc.

We capped off the evening with a little raffle "teaser". Thanks to donations from Forrest N5VWF, Tom WA9AFM, and Hank WA5JRH, we raffled off some radio books, AMSAT cups, and a 40M vertical antenna. I had a great time selling tickets, the buyers had a greater time buying tickets, and the winners were ecstatic!!

The tickets sold to date are good for the big drawing at the next meeting Tuesday April 20, when more prizes will be raffled, including the NEW Alinco DR 112T 45 Watt 2M Mobile. Bring along any items you would like to donate to be awarded at this or subsequent meetings. Tickets are a buck each, and we will be selling right up to drawing time! Feel Lucky?? Remember, your ticket must be present to claim any prizes.

Membership News

From Mac K2GKK, comes the following roster changes, which brings our membership rolls to 279!!

New Members

The Oklahoma City Autopatch Association welcomes the following new members who are listed below:

CALL	NAME	QTH
KD6DGD	Paul	Bethany
KD5EP	Walter	Okla City
WB5LBU	Alan	Yukon
N1LPN	Linda	Del City
N5NSL	Ed	Okla City
N5PMI	Drew	Del City
N5TWY	Randall	Tecumseh
W5UZV	Willard	Bethany
KA5VNT	Dana	Shawnee
N5VYI	Alicia	Okla City
N5VYJ	Chris	Okla City
N5WNR	Rick	Moore
KI5YF	David	Okla City
N5YSN	Arch	Mdwst Cty
N5ZHM	Gary	Okla City

Welcome Aboard! We hope you enjoy your affiliation with OCAPA, and look forward to your participation in the club activities and on the repeaters.

Dropped from the roster:

We regret the non-renewal of the following: WA5PDH, N5QAR, and Grant Ringel.

Don't forget to ever pass up the opportunity to invite a prospective member to a meeting, or motivate them to join the club.

Technical Tips

To complete last month's review of DX QSLing, let me briefly cover some tips on how to use the Incoming DX Bureau. The following are excerpts from the information provided in the January 1992 issue of QST. Please refer to the information on Pages 58 and 59 for more complete information:

Within the US and Canada, the ARRL DX QSL Bureau System is made up of numerous call area bureaus that act as central clearing houses for QSLs arriving from foreign countries. These "incoming" bureaus are staffed by volunteers. The service is free and ARRL membership is not required.

How it Works: Most countries have "outgoing" QSL bureaus that operate in much the same manner as the ARRL Outgoing QSL Service. The member sends his cards to his outgoing bureau where they are packaged and shipped to the appropriate countries.

A majority of the DX QSLs are shipped directly to the individual incoming bureaus where volunteers sort the incoming QSLs by the first letter of the call sign suffix. One individual may be assigned the responsibility of handling from one or more letters of the alphabet. Operating costs are funded from ARRL membership dues.

Claiming your QSLs: Send a small supply of 5 x 7 1/2 or 6 x 9 inch self addressed, stamped envelopes (SASE) to the bureau serving your call sign district. Neatly print your call sign in the upper left corner of the envelopes. A suggested way to send envelopes is to affix a First-Class stamp and clip extra postage to the envelopes. Then if you receive more than 1 ounce of cards, they can be sent in a single package.

Some incoming bureaus sell envelopes or postage credits in addition to the normal SASE handling. They provide the proper envelope and postage upon the prepayment of a certain fee. The exact arrangements can be obtained by sending your inquiry (with and SASE) to your area bureau. The Incoming DX QSL Bureau for the US Fifth Call Area is:

ARRL W5 Incoming QSL Bureau
PO Box 50625
Midland, TX 79710

For those of you whose area designation in your call is other than 5, please refer to January 1992 QST Page 59.

Hope this helps with your QSL activities.

Other OCAPA News

We recently had a little problem with the 82/22 Repeater, in that the output was in the range of just a few watts. Did you notice any difficulty in hitting the machine from some remote locations? Mac K2GKK and Mike N5VFT spent a good part of their Sunday, March 22 diagnosing and repairing the problem, which turned out to be a bad tube in the finals. We have a BIG SIGNAL again! Let Mac and Mike know you appreciate their efforts when you hear them on or at the meetings or feasts! TNX guys!

Some recent upgrades that were heard on the repeater are:

Forrest N5VWF who passed his 5 WPM Code test and is now a full fledged Tech, and Baron N5PQK, who passed 20 WPM Code, and is a new Extra Class! I understand that Baron has applied for a change of call sign as well.

For those and any others that we may have missed---CONGRATS!!!!!

C I A O !

73 de NJ1V ....."victor"

NEW YEARS EVE: Get 807s, brown 807s, "screwdriver", etc. and drink a toast to W5HXL.

MEMORIAL DAY: Dress up rig. (Dust it off in other words.)

HALLOWEEN: QSO with spooks.

1. AERONAUTICAL CENTER ARC
Meets: First Thursday, Flight Standards Building, FAA, South MacArthur 7:30 pm.

PR	Doug Teachman, W0DXA	392-5459
S/T	Ted Anderson, NY5W	685-4016
AsVP	Harold Todd, WA5VAQ	685-3685
Asvp	Charlie Greene, WA5JGU	943-5631
Editor:	Jack WB5SUN	

2. CENTRAL OKLAHOMA VHF
Meets: 11:00 am, 3rd Sat., Favorite's Cafe, 3701 S. Western, OKC

PR	Jack Muse, WB5ZKZ	691-1152
VP	Fred Boardman, W5NL	427-2505
SE	Joe Buswell, K5JB	732-0676
TR	Ellard Foster, W5KE	789-6702
Editor:	Joe Buswell, K5JB	732-0676

3. MID-OKLAHOMA REPEATOR, INC.
Meets: First Tuesday, 6:00 pm social, 6:30 meeting, Favorite Cafe, 36th & S. Western, OKC

PR	Steve Corman, KB5CDF	
VP	Robin Graham, N55PA	632-0225
SE	Marvin Phelps, WB5DXZ	672-6702
TR	Toy Graham, KI5TZ	632-0225
Editor:		

4. OK CITY AUTOPATCH
Meets: 7:30 pm, third Tuesday, Salvation Army, N.W. 50th & Penn.

PR	Jim Bartlett, KA5PSF	359-1299
VP	John Guida, NJ1V	340-8555
SE	Ken Goddard, WA5DTL	946-4973
TR	Mac Macdonald, K2GKK	672-4947
Editor:	John Guida, NJ1V	340-8555

6. ALTUS ASSOCIATION
Meets: 7:30 pm, Second Thursday, North Main Fire Station, (CD) Altus

PR	Loren Simms, WA5CBF	477-0921
VP	None	
S/T	Jim Molledahl, KB5LS	482-5308
Editor:	Jim Molledahl, KB5LS	482-5308

7. BICENTENNIAL (76er) ARC
Meets: 7:30 pm Second Tues., 1601 N. Lincoln Blvd., Parking in Rear

PR	Hank Stokes, KB5XM	376-1067
VP	Chad Drewery, N5QIQ	
TR		
SE	Jack Conley, AA5VU	
Editor:	Not Filled	

9. WHEATSTRAW ARC
Meets: 2:30 pm Second Sunday, Location Varies, see Club Section for Details

PR	Leo Peil, WZ5H, Canton	886-2998
VP	Ray Barnes, AB5Z, Longdale	274-3334
S/T	Joe Garland, WA5FLT, Calumet	893-2660
Editor:	Ralph Wilder, WA5PFK, Watonga	623-5421

10. OKlahoma DX Association
Meets: Quarterly - Hamfests, DX Net Saturdays - 1600 UTC-7.195 MHZ, Box 88, Wellston, 74881

PR	George W. Adkins, AD1S	
VP	Darrell Reed, KF5DA	
SE	Paul Harrop, WB5NDN	
TR	Paul Wardell, N5PYD	
Editor:	George W. Adkins, AD1S	356-4101

11. EDMOND AR SOCIETY
Meets: Odd Months, 3rd Sunday, 2:00 pm, Edmond EOC; Dinner, Even Months, 3rd Friday

PR	Aldon Sage, KB5LIC	341-8978
VP	Jim Richardson, N5OHL	524-0456
SE	Lynice Hamlin, KB5FOH	427-2828
TR	Ed Granger, KB5DZU	348-3454
Editor:	Jim Richardson, N5OHL	524-0456

14. CIMMARON ARS
Meets: 7:30 pm, second Thurs., WX5Y Playhouse 827 S. 13, Fairview

PR	Ray Barnes, AB5F	(405) 274-3334
VP	Terry McCall, N5MLT	(405) 227-3672
SE	Dennis Painton, WK5V	(405) 764-3599
TR	Nadine Painton, N5FMH	(405) 764-3599
Editor:	John Medley, N5WVU	(405) 227-3534

15. SOUTH CANADIAN ARS
Meets: 9:30 am, Second Saturday, Red Cross Bldg., North OU Campus, Norman

PR	Don Schader, KI5TP	321-9649
VP	Mike Winkel, N5SOF	366-6639
TR	David Gates, N5LCL	392-5677
SE	Gary Skaggs, WB5ULK	799-5363
Editor:	Ken Brown, N5KUK & Gary Skaggs, WB5ULK	

16. EDMOND AR CLUB
Meets: 7:00 pm, Second Monday, Various locations.

PR	Mark Northcutt, WD5DYI	755-4672
VP	Wendell Cochran, WB5ISO	943-4308
S/T	Kay Northcutt, WD5DYJ	755-4672
Trustee:	Dennis Orcut, WB5ISN	340-0034

18. GREAT PLAINS ARC
Meets: 2:15 pm, First Sunday, Home of N5LRR, 2914 Osage Drive, Woodward

PR	Bob Bayles, WB0GAX, Woodward	254-3561
VP	Andy Taylor, N5LRR, Woodward	256-4017
SE	Rod Ford, WB5OVT, Gage	923-7683
TR	Freida Patterson, N5EOX, Woodward	256-2111
Editor:	Phillip Perry, N5QCN	938-2453

CENTRAL OKLA RADIO AMATEURS
Meets: 7:30 pm, Fourth Tuesday, Salvation Army, Penn & NW Highway, OKC, (Back Door)

PR	Frank Tassone, AA5GI	341-1124
VP	Jack Conley, AA5VU	392-5072
SE	Jim Buswell, N5BEQ	
TR	Tom Mangham, K5LDI	677-5291
Editor:		

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PLEASE help us keep your information up to date. What time, where, when, who are your officers, editors, and their phone #. Check YOUR entry, it can be changed.

If there appears to be a mistake - check with your club official. We can't do anything about it. Below is a sample label.

4 92/01 2
WILSON, MIKE WA5RTY
1234 W 49
McCLOUD OK 74851

The "4" means Autopatch Club, 92/01 means he is overdue. The "2" is for postal rates.

Dear Subscriber:
If your address label has a SAD FACE it means that you are due to renew your subscription or your club dues and you will continue to get the C&E for three months then, sorry but post office rules say that we must cancel you until you pay up.

Likewise
if
you
see
a
RED X here

this will be your last C&E until you renew.

Dear Secretary/Treasurer:
When you want a change of any sort to your membership just remember...fill out a slip (COMPLETELY). Watch for the DATE you received their money and the date subscription expires. Have your slips, or list of deletions, to me by the 22 of each month. If there is anything about C&E subscriptions that you need to know, get in contact with:
Joe Harding, 9211 N. Council #216, OKC, OK 73132, Telephone 720-1019

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OKlahoma DX Association

OK DX Just for the Fun of It

OKDXA DXpedition Success!

The DXpedition by OKDXA members to the Republic of Palau was a resounding success. DXpedition organizer Jim Hood, WV5S reports that over 19,000 QSO's were completed including over 2,000 QSO's in the ARRL International DX Contest. Our congratulations go to all of the OKDXA members who made this a successful trip,. and our special thanks to those members who participated in their first DXpedition. The operators were: Jim, WV5S / KC6SS; John, NJ1V / KC6VV; Coy, N5OK / KC6OK; Dave, N5CG / KC6GG; Charlie, WORRY / KC6RR; Ruth, K5RJM / KC6MM and Craig, KB5BOB / KC6OO. QSL go to OKDXA, P.O. Box 88, Wellston, OK 74881. Thanks also to the Oklahoma Comm Center for their wonderful support of this and other OKDXA trips.
We are asking WV5S to share some of the experiences in Palau for a future article. Look for it here.

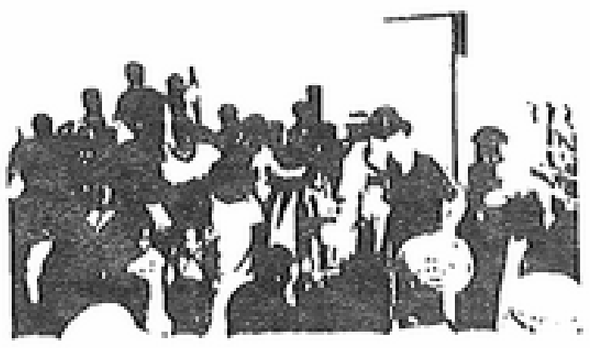
On the road again....

Just as one expedition concludes, another is underway as you read this article. OKDXA members Craig, AH9B, Gary, N5MIH and Ken, V73CT are on Kwajalein Atoll for a whirlwind trip which included a multi-single entry in the CQ WPX Contest. If you heard V73DG or V73DH, you worked Oklahoma's own Craig and Gary supported by OKDXer Ken! We are anxiously awaiting the results of their V73DH contest effort.

Strange QSL of the Year...

Our good friend and OKDXA member Ken, V73CT sent us the following "QSL card" from the "amateur station" that caused quite a stir on the bands briefly back in late January 1992. This is a reproduction of the "QSL" which is approximately 8-1/2" x 12" in size. The QSL was accompanied by a copy of "Licence No 1" (sic) issued by the "Interim Government" of the Arawa Republic of Bougainville. The Licence stated, "The Interim Government of Bougainville which declared independence on 17th May, 1990 and is the sole authority in control of the Republic of Bougainville hereby grants Amateur Radio Operating permission to Sam Voron...
This person has shown proof of Australian Amateur Radio qualification and callsign... issued by the Australian government. This qualification is recognised and the following licence conditions apply..."

CALL SIGN - C1A
Frequency Bands - (usual amateur frequencies are the recited on the licence.)



An interesting note on the licence is the regulation that "power level shall not exceed 10 kilowatts output mean carrier power or 10 kw peak power for ssb..."

The form went on to say, "This licence remains current indefinitely unless canceled by the Government of the Republic of Bougainville."

It is rumored that Sam was forcibly removed from the island by Police of the government of the Solomon Islands, possibly assisted by a military unit from the Royal Australian Navy.
Too bad ole Sam was allegedly booted off the island; C1A sounds like a DXers QRO dream! Now to find an amplifier capable of 10 KW!

The Annual Mailing...at last!

By now you should have received your large envelope of goodies from OKDXA. Your envelope should have contained the following items:

1.) OKDXA membership certificate
2.) Collector & Emitter renewal form
3.) OKDXA Renewal form
4.) OKDXA camera-ready artwork (for your QSL orders, etc.)
5.) Order blank - OKDXA shirts, jackets, caps
6.) State of the Association letter from your president.

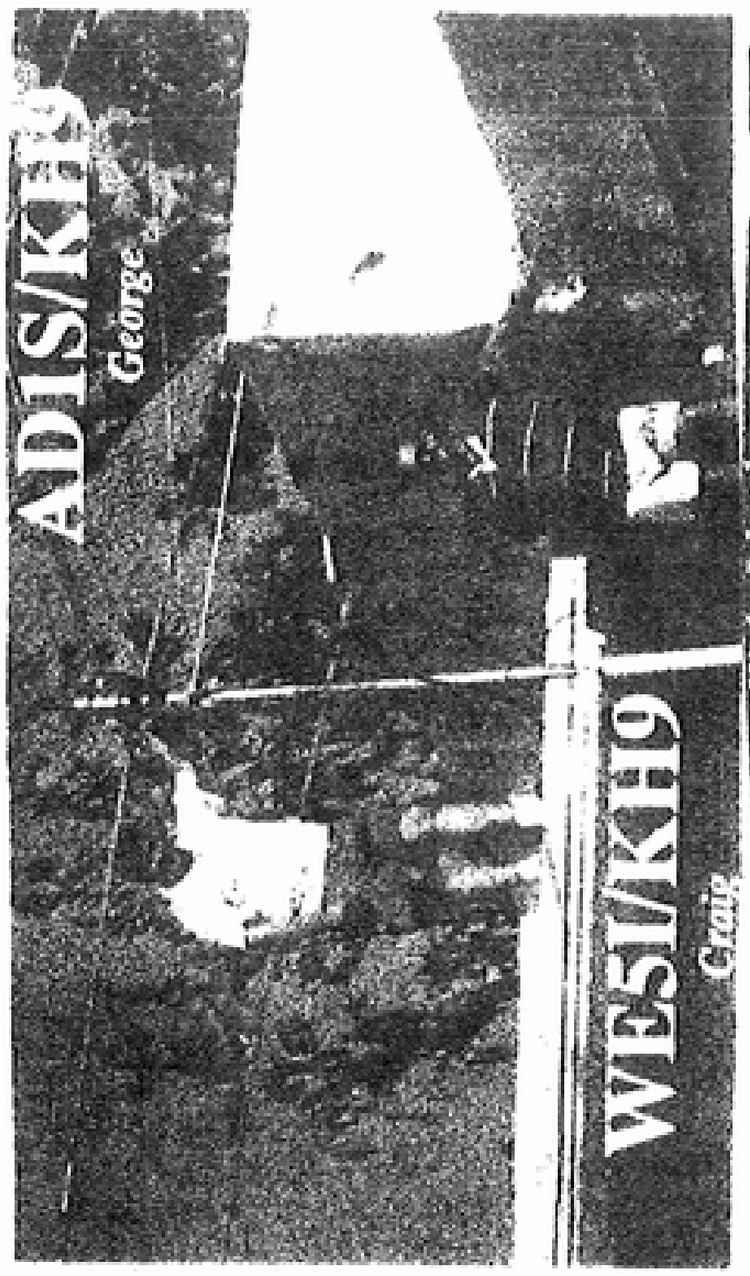
PLEASE fill out your renewal form AND the Collector & Emitter forms NOW and send them right away to P.O. Box 88, Wellston, OK 74881. Enclose your renewal dues if you have not already forwarded them to AD1S or treasurer N5PYD. You MUST return both forms if you wish to receive the C & E. Postal regulations require that a current form be on file with the C & E editor for inspection by the postal authorities. (Yes, they really do look at that stuff.) Don't delay the return of these forms. PLEASE take a moment and do it now.
If you are an OKDXA member and did not receive your annual mailing, please drop a postcard or QSL card to AD1S and we will make sure that you are in the computer. (We sustained a crash in our previous membership database and hopefully no one was "lost".)

Wake Island Adventure...

Craig, WE5I and George, AD1S were invited to operate amateur radio from the Wake Island Air Force Base from 23 -30 October 1991. We made over 13,000 QSO's including 4,750 QSO's in the CQWW SSB International DX Contest. Both callsigns were used signing portable KH9 prior to the contest. WE5I/KH9 was the contest call and AD1S/KH9 was used for QSO's following the contest. Equipment was shipped in advance to operate two complete stations including beams, Carolina Windoms, amps and those stout and sturdy Icom IC-735 transceivers. All went well but we quickly learned that utility power restriction made two stations an impossibility. We had been given permission from the base commander to operate from the

Continued

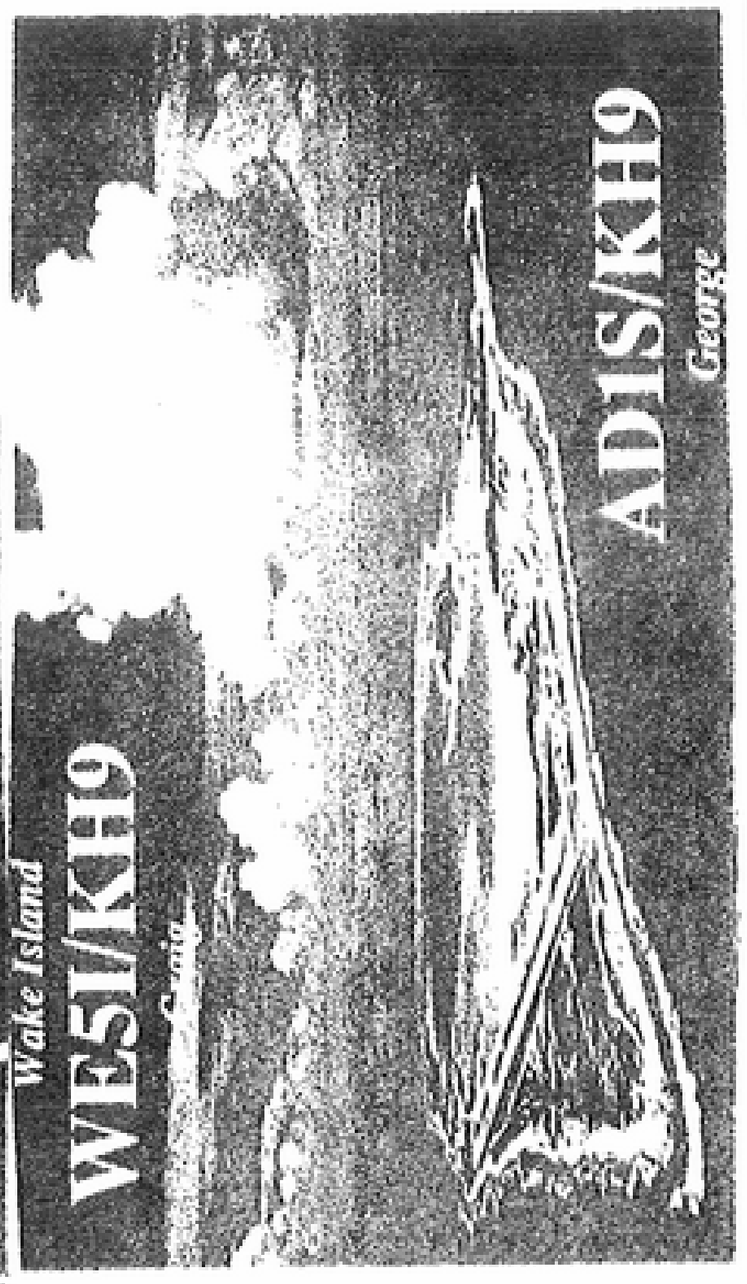
old MARS station, but upon arrival we unhappily learned that the power main to the old MARS building had "blown up" and the entire building was supplied by a single run of ROMAX cable jury-rigged from a temporary power connection. Craig and I decided to keep one station on the air around the clock and to take shifts of operation, sleep, sightseeing, etc.



This is one of the KH9 QSL's showing George, AD1S (left) and Craig, WE5I on the roof of the MARS Building on Wake Island. Note that the beam is less than four feet above the roof.

The Air Force was a wonderful host. Our special thanks go to Commanding Officer Major Michael Koch, USAF Det 4 15th Air Base Wing, USAF Military Airlift Command and the crews of those thrill-a-minute C-141 transports, Tom Russell, AH9AC of the National Weather Service, Wake Island and to the numerous other ham and non-hams who made our trip a success.

Wake Island is a U.S. possession, a typical coral atoll consisting of three islands - Wake Island, Wilkes Island and Peale Island which are connected by a bridge and causeway. Total landmass is about 2.5 square miles built up on the remains of an underwater volcano.



Wake Island Air Force Base is rich in history. It was the site of a valiant defense by U.S. military and civilian workers against invading Japanese forces during the weeks following Pearl Harbor. Wake Island was also the location of the historic meeting between President Harry S. Truman and General Douglas MacArthur when the General was "fired" by the President during the Korean conflict.

Wake was a great DX spot and we hope to return someday soon.

DX Programs galore!!

Ham Holiday 1992 should be a DXers delight. In addition to the Annual OKDXA luncheon, there will be at least three DX forums on the schedule, including the slide presentations of the KH9, KC6 and V73 DXpeditions. There will be the usual DX PacketCluster demonstration and we will have a special guest speaker for the luncheon. Tentatively scheduled to speak is our newest "DX" member, Kenneth Wells, V73CT. We will probably also award Ken the stuffed rabbit for coming to Ham Holiday from the furtherest distance! Let's see if somebody can beat 7,000 miles!

DXer lost and found....

Many of you will remember Stuart Honeysett, ex- H44SH. He is a member (#44) of OKDXA but we lost track of Stu when he departed from the Solomons in 1990. Well, I am pleased to announce that Stu is alive and well and preparing to depart from the Ivory Coast where he has been quietly operating as TU4DR. Stu is moving back to England and will be awaiting an assignment to another juicy DX location. Stu is an engineer who specializes in Agricultural projects in developing nations. We wish him sucess in his impending assignment and hope he won't be a stranger to OKDXA.

Don't forget your renewals..

As we close for this month, please remember to mail your renewals and C & E forms today. Until next month, good health and good DX! de AD1S.

The Wheatstraw Club met March 8 in Okarche. There were 41 present.

Five of the visitors were the Frank Sissons family, his wife Carol WA5ZKW is the daughter of WA5PFK Ralph and Goldie Wilder. N5XUI Marvin and Mary, the Garretts attended for the first time. Marvin received his amateur license in November 1991. He joined the club at the meeting. We were certainly glad to have them. Marvin said he had lived all of his life in Kingfisher.

AB5Z Ray appointed N5MPH Robert as the activities chairman for 1992.

Some of the Wheatstraw members attended the Elk City Ham Fest. They enjoyed the day there.

W5MGZ Perry Jones is out of the hospital, took therapy in Oklahoma City and is doing good at home now.

Word is that K5VRL spent a few days in the hospital with his heart acting up some. He is doing fine now.

WA5FLT Joe made a report on the Oklahoma Repeater Society. Frequencies will be deleted and assigned to someone else if the present allocated frequency holder does not reply when contacted of the nature of the

Continued Next Page

frequency. It seems that some of the earlier repeaters are no longer in service.

The Great Plains ARC is having their Eyeball QSO meeting April 4 & 5. Our club voted to move our April meeting to the 5th, being held on the caravan as we travel on the way to Mooreland. Sunday will feature a covered dish dinner, bring your own eating equipment.

KB5MPM Venus and WD5JNT are the proud grandparents of Dustin Lee Adkins. Venus said this makes them seven grand children. Ted had better explain to the daughters what is the cause or you might find yourself sleeping across the foot of the bed when they come to stay all night. Venus had a friend visiting the meeting, John Rahija from Kansas City KS.

According to the W5YI Report March 1 issue. The FCC's Ralph Haller addressed the Miami Hamboree. He is the chief of the FCC's Private Radio Bureau. He praised the VEC's and the VE's because he thinks it is an amazing system. Last year there were over 8000 exam sessions, over 100,000 examinees, nearly 175,000 individual elements administered. He feels that there might not be an amateur radio service except for the accomplishments of the VEC's and VE's. The commissions personnel has diminished from 2400 people to a little over 1600. He felt that the No Code Technician license is one of the greatest explosions in Amateur Radio. Records show that when most amateurs get the No Code license they run out and buy code tapes and study so they can upgrade.

Record show that the number of Amateur license is on the increase. As of December 1985 there were 5115 in Oklahoma, in December 1991 there were 6843. The technology of the Technician Class are increasing to very high tech amateur equipment, mostly mobile units.

On January 22 1992 Glenn Baxter K1MAN of Belgrade Lakes MA founded the American Amateur Radio Council (AARC) to provide an alternative to ARRL's claim to be the sole national representative of Amateur Radio. Glenn is annoyed that the League elected a new president and proposed changes to the no-business rule (97.113) without consulting ARRL membership.

AARC membership dues are $25,00 per year and that doesn't include a magazine. AARC circulates our proposed actions among members who votes as he sees fit, Baxter says. AARC will be heard in Washington.

AARC has prepared an 18 item list of questions for their membership to respond to concerning acceptable communications on amateur radio frequencies. On February 16 the AARC filed a motion to extend the comment period on RM-7895 for 60 days beyond the present March 5, 1992 cut off.

Amstat plans to launch a satellite three timed larger than any that has ever flown.

A thought for the day. A bird never flies so far that its (tale) doesn't follow. My mother told me that when I was a child.

73 WA5PFK Ralph

Edmond Amateur Radio Society — Reaching out to Oklahoma and the World

REPEATER FREQUENCY 147.135/735

*** O.R.S.I. MEETING ***

On Feb. 29th EARS hosted the ORSI (Okla. Repeater Soc. Inc.) meeting at the Edmond Library. Five new directors were elected and one of them was Lee KA5WIS. During the directors meeting, new officers were elected. Lee is also the new ORSI president!

*** WEATHER SPOTTING ***

Jim Purpura of the Nat. Wx. center in Norman conducted a weather spotters training class on March 3rd in Edmond at City Hall. He did a great job with interesting slides and showed video of storm development, the latest in computer modeling of severe thunderstorms, plus some very thrilling tornado films. We always think that tornadoes are what to look out for, but in fact they are really rare. Lighting is the most dangerous event associated with t-storms. Staying inside is your best bet. Protect your radios and other equipment by un-pluging the power cord. My TV got taken out last year when lighting struck the power line a couple of blocks away. And for sure, disconnect all coax lines to keep from frying your radio.

*** WEATHER NETS ***

Springtime means you will hear weather nets called on the club repeater, 147.135 Mhz. Be alert for a net by noting a change in the courtesy tone. If a net is in progress, you will hear the morse code 'n' for a courtesy tone (dah-dit). Plus the repeater will also make voice annoucements such as 'weather net'. All autopatch functions are disabled during the net. Only weather spotters or stations with emergency or priority traffic should use the repeater during a weather net. All transmissions should go through net control.

*** HOW'S DX ? ***

HF propagation during the ARRL DX contest on March 7-8 was superb. DX stations were all over the bands. Ten meters stayed open well after dark to the Pacific Region. I was able to pick up Indonesia and Hong Kong quite late in the evening on 15 meters. In all, for the contest I worked 21 new DX countries. Some were picked up while operating mobile to the Elk City Hamfest with Joe N6CL and Carol K5CPZ.

** 'N5' CALLS ALMOST HISTORY **

If you have been listening to the 2-meter radio recently, you may have heard some of the new calls that begin with the letters 'N5Z'. Who will get the last 'N5' call - N5ZZZ? When this one is issued by the FCC, the N5 calls will be history. Those of us with 'N5' calls should hang on to them because we represent a part of amateur radio history just as those that have calls that begin with the letter 'W' or 'K5'. After the last N5 is gone, anyone that that passes the technician exam will get a call sign from the 'novice' call group. These are two-by-three calls that are currently still begining with the letters 'KB5'. According to my calculations, we have more than 400,000 calls remaining in the 5th area 'novice' group. You may have noticed that in the 4th and 6th call areas the 'N' calls are all issued. The 4th area is currently on calls that start with 'KD4'.

** ST. PATRICK'S DAY PARADE **

Gloria KB5BGM operated as net control for the staging of the St. Patrick's Day Parade in downtown OKC. She said that this year the parade ran the smoothest she has ever seen. Thanks to all our volunteers:

Edith KA5YPX	Bill N5NUK
Tom KA5WAV	Kevin N5USQ
Bill K5SKA	Linda N5OJP
Steven N5OLX	Jim N5OHL
Stefanie KB5HWI	Clara KG5UG
Terrie (waiting on license)	
Mike KB5BIX	Kay KB5LDO
Alton KB5LIC	

*** HAM RADIO CLASS ***

Kathleen KB5KIJ gave us a report on her amateur radio class that she teaches at the Bethany Middle School. This is her second year of the special, class. So far 14 students have received their novice ticket. She also has 5 more that will be testing soon. Books for the class were jointly sponsored by EARS and KENWOOD as part of the K.I.D.S. program. We are very proud of the work that you do Kathleen! She has one old HF rig at the school, but really needs someone to help out with

E A R S (Continued)

another rig(s) and perhaps some antennas also.

*** FIELD DAY ***

Field day 1992 is only about three months away.The committee has already confirmed the field day site. It will once again be at the Logan County Volunteer Fire Dept. located just a few miles north of Edmond. What is field day? Those new to ham radio may have never been to field day. Field Day is a national event for radio clubs and individuals to set up and operate under simulated emergency conditions. We set up several rigs and temporary antennas and then try to make as many contacts as possible during a 24-hour period. Not only is it a contest, but EARS takes this opportunity to teach anyone interested, how to operate HF rigs. An extra-class call is used for the entire event so that anyone can operate a rig. Field Day is also a big social event for the club with our June dinner meeting also held at the site.

*** NEXT MEETING ***

Our April meeting will be a dinner meeting. The date and location will be given out on the EARS Information Net which meets each Monday night at 8 PM local time. The board meeting will be Wednesday April 15th at 7 PM at the EOC. CUL,JIM N5OHL

ELIMINATE THE WORD "MAN"

Should the word MAN be replaced by PERSON? There are those who no longer use the word CHAIRMAN. It must be CHAIRPERSON. How radical this could become when used for such words as freshman, salesman. foreman, and mailman.

A manhole would become a personhole, manslaughter would be personslaughter. If the slaughter were by a woman it would womanslaughter.

A manager would be a personager, mandate would be persondate. To mandate that so many manhours be worked every day would read that it is personated that so many personhours be worked every day.

Residents of Manhattan

slaughter were by a woman it would womanslaughter.

A manager would be a personager, mandate would be persondate. To mandate that so many manhours be worked every day would read that it is personated that so many personhours be worked every day.

Residents of Manhattan
Island may not object to the change to Personhattan Island.

I'M TIRED

Yes, I'm tired. For several years I've been blaming it on construction work, home repairs, engineers, architects, blueprints, specifications, the various trades, GTE, TECO, taxes and a dozen other problems that make you wonder if life is worth living.

But now I find out, it's not that.

The population of this country is 200 million. Eighty-four million are retired. That leaves 116 million to do th work. There are 75 million in school, which leaves 41 million. Of this total, there are 22 million employed by the government. That leaves 19 million to do the work.

Four million are in the armed forces, which leaves 15 million. From that total take the 14,88,000 individuals who work for the state and county government, and that leaves 200,000 to do the work. There are 188,000 in hospitals, so that leaves 12,000 to do the work. Now there are 11,988 in prisons, which leaves just 2 people to do the work. You and me. And you're sitting here reading this. No wonder I'm TIRED.

QSB, Tampa Bay Repeater

HEARD ON THE PARTY LINE

This month we'll be pointing some puns in your direction. Hope they aren't loaded. Okay, pun pals.

LIQUIDATE: Means taking the YL out for drinks.

EAR: You "ear" someone calling CQ, you think.

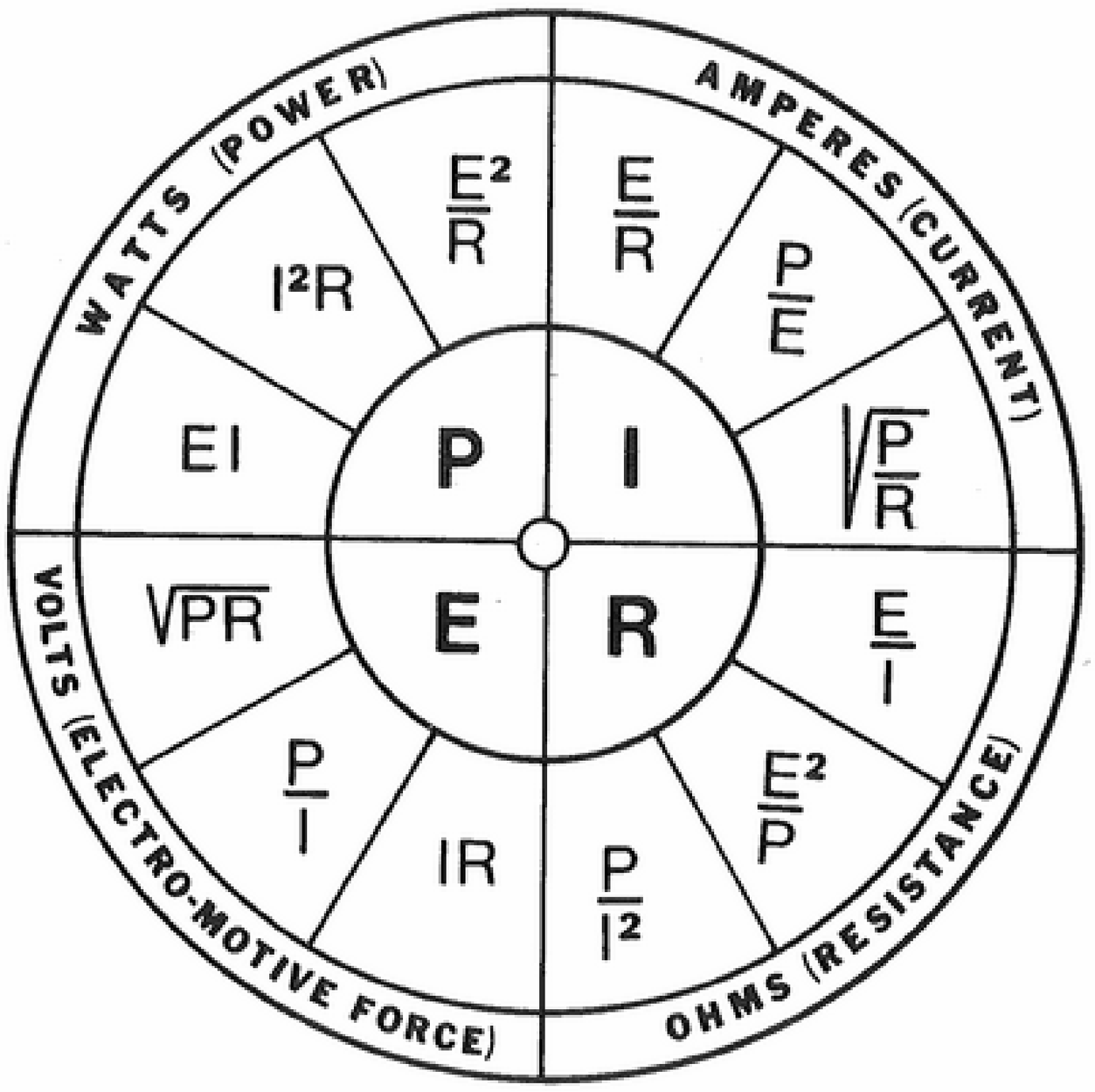
MUMBO JUMBO: An elephant that can talk on 40 meters.

MHO: He's due at the radio station in half a mho.

MAXIMUM: A hams buxom mother.

CHRISTMAS DAY: Get on the rig and stay out of the way of the XYL's last minute doings.

CHRISTMAS DAY: Open presents-including Q S Ls, S W R Bridge,Log Book and a new microphone.



VHF Club *NEWS*

W5LOW
Elmer Goekler Memorial Station

Minutes of March Meeting

Meeting was called to order at 11:59 a.m. by President Jack, WB5ZKZ, with 21 members and guests present. Minutes were accepted as published in the C&E; Treasurer Ellard, W5KE's, report was likewise accepted.

It was reported that Jim, K5VRL, is home from the hospital and doing much better after having a six-bypass operation. Get better quick Jim!

Turkey of the Month Award was made to George, W5JKK, in spite of Robert's Rules of Order as follows: When nominated by (name withheld) and with no second, El Presidente called for a vote. Point of order was raised that nominations had not ceased. This was ignored while El Presidente counted the three yea votes then declared George winner without calling for nay votes.

Meeting adjourned at 12:14 p.m. so Ken, K5VFN, could make a presentation on his discovery of how Pike Passes work. Should have been there to hear this one! (No! I am not going to tell you how to make one. You should have been there!) Joe, K5JB, Secretary (with help from another name withheld)

Ahh! It's April!

And you know what that means? April Fool's joke? Nope, well maybe. It really means that it is time to get ready for Dayton again. I got the packet message today from Keith, WA8ZWJ, advising the International Order of Krazies (IOOK) where the watering hole would be in the flea market. I started looking for the walkie talkie batteries that have been stashed away for the last year, and double checked that I had my airline tickets and Hamventon ticket.

There's nothing like Dayton, of course. I might not look forward to going every year as much if I didn't enjoy meeting the others who I have gotten to know so well over the years. If there is one thing amateur radio has done for me it is to cement relationships with a lot of fine people all over the place. When people ask me, "What do you DO with amateur radio?", I first say that I, 1. Satisfy my curiosity about how things work, and 2. Keep up with my friends. I guess the dichotomy of experimenting, which is kind of anti-social, and hobnobbing, which has kept the hobby interesting to me. And that may be the reason why you meet so many amateur radio operators who have sustained interest for 25 years or more.

Kind of like the chicken and egg deal. You don't start with a bunch of amateur radio friends when you first get your ticket. You only know a few, perhaps those who got you interested in the first place. After a period of exploring the bands and engaging in social contacts you meet people who have similar interests to yours and chance acquaintances build into friendships. My network of friends extends all over the U.S. and into Mexico, and I enjoy every chance I get to visit with them in person. Dayton is the place where a large number will come to visit and renew friendships. Hoo Boy! I'm ready! Joe, K5JB

GE MASTR II at 9600 Baud

This is one of those rare articles I keep looking for and really happy to get. Hank, WA5JRH, is a true experimenter in the amateur radio spirit and he has been exploring what good, commercial radios can be used successfully on 9600 baud packet radio. He had already had success with Johnson TPL (See article about availability that follows). This month he tackled the General Electric (GE) MASTR II, a radio well known for its quality and durability, and used a lot for amateur radio FM repeaters. This article was given the K2GKK technical review and posted on the packet BBS circuit. (Mac is one of our local MASTR II gurus.) I wanted it for the technical file here, if nothing else. Here it is for all you experimenters out there.

(Note that for technical reasons, in this context a baud is a bit per second so 9600 bauds is equivalent to 9600 bits per second -- not normally true at that speed.)

For you unfamiliar with some of the terms, ICOM is the name General Electric uses for the crystal oscillator modules used in the transmitter (TX) and receiver (RX). Temperature compensation is used because crystal oscillators change frequency with temperature. In commercial service this frequency change is corrected, in amateur radio it is not necessary as long as the radio performs satisfactorily. The temperature compensation diode is a varicap (variable capacitence) diode that changes capacitance with a change in voltage placed across it. When this correction voltage is derived from a temperature sensor, it is used to cancel the temperature effect on the crystal. When connecting the modulator (modem) to the modulating circuit in the radio it is important that it be done in such a way as to not disturb the operation of the modulator, e.g. load it down or change the bias voltage. Each radio's circuit is different and it takes at least a cursory examination to determine the correct method of applying the modulating voltage. Now on with Hank's article:

The GE MASTR II series of radios may be adapted to 9600 baud packet operation by utilizing the temperature compensation diode in the TX ICOM as an FM modulator.

There are 3 types of ICOMs available for the MASTR II (EC, 2C, and 5C). The EC depends on a 5C plugged in one of the other channel positions for its compensation. This is accomplished by the temperature compensation network in the 5C supplying a DC voltage to pin 2 of the ICOM. Pin 2 of all ICOM plugs in the MASTR II are tied together, so one 5C can provide temperature compensation voltage for up to 15 EC ICOMs in a multi-channel radio. The 2C ICOM provides its own temperature compensation and has NO connection to pin 2.

Since the unit I was adapting was going to be used in a controlled environment, I utilized the EC ICOMs. I removed a .01 uF bypass that is on pin 2 inside the TX ICOM (this may not be necessary). I also isolated the pin 2 connection between the TX and RX ICOMs so as not to load the TX signal with the RX ICOM. I also connected 22k resistors from pin 1 (10V reg.) to pin 2 and from pin 2 and pin 4 (ground) to supply 5V operating bias to the varicap in the ICOM. This was done on both TX and RX boards. If you use a 5C ICOM, this is not necessary since the internal compensation network supplies this voltage. The 2C and 5C ICOMs are identical but the 2C has an open circuit going to pin 2. It may be modified to a 5C if needed.

TX signal is now applied to pin 2 of the TX ICOM bank. The RX signal is supplied by J606 of the receiver's IF/AUDIO/SQUELCH board.

The UHF radio I was using was for 450 to 470 MHz. I was able to tune it to 440.975 MHz with no problem. I tried 430.55 but experienced problems getting the RX multiplier stages to work. I did not try to TX on that frequency. Component changes may be necessary to go below 440 MHz as per the GE manual.

73, Hank WA5JRH @ WB5FWE.OK

Johnson Radio Source

OPRA has found a source of Johnson TPL UHF radios for $75 each. They are excellent radios for nodes (either 1200 bps or 9600 bps). We need to buy 12 radios to get the price and OPRA does not currently have the funds to purchase that many. If anyone has an need for one or more, or would like to donate one to OPRA (tax deductible), please call Hank Blackstock, WA5JRH (405)722-0640 at home or (405)755-5622 at work. 73, Hank WA5JRH @ WB5FWE.OK

New Virii Found

Along with the Aprilus Primus Virus recently discovered -- That is the one that makes amateur radio operators think that any technical article they read in the April C&E must be some kind of a joke that they don't understand. -- Here are some others that have been identified as infecting the ham radio community.

Electricus Interruptus Virus is one which causes an electrical appliance (amateur radio transceiver, computer, etc.) to cease operation when the source of energy is removed. It happens when lightning hits close, when a squirrel gnaws through a wire or you stumble over an extension cord. It is diagnosed by observing if the appliance is very, very cold, or at least, at room temperature (and the absence of winky blinky things).

Sparkus Digitus Virus causes an involuntary muscular contraction and secondary spontaneous vocal emission when a distal phalanx and a proximal electrical component, having highly elevated and unexpected electromotive potential difference, meet.

Circuitus Interruptus Virus causes mysterious interruptions of packet radio connections. It is carried in Radio Shack plugs used to make connections between TNCs and walkie talkies. This virus has also been known to infect the packet station via promiscuous abuse of rubber duckies. This should not be confused with Electricus Interruptus Virus.

Packetus Halitosis Virus is caused by mold growing inside the TNC because it never saw the antifungal light of day during a deviation setup. This is related to the Halitosis Restrictus Virus that is insidious to Kantronics TNCs that have only two transmit level adjustments, "Too High" and "Too Low".

Nodus Constipatus Virus (sometimes called Switchus Constipatus) marked by queuing of transmit packets until the cows come home or the using operator goes away. It is passed between networking devices that are not practicing safe configuration practices, such as closing the squelch on an FM receiver, clearing the birdie found in most TNCs off of the receiving frequency, or using a carrier detect modification as a prophylaxis against the first two omissions. This virus can attack any packet station but it is benign on non-networking devices, only affecting the owner.

Hyperego Anarchistus Virus causes amateur radio packet operators to let their independence overwhelm their gregariousness to insure that a network won't. This virus is manifest in installing network devices that contribute nothing to networking and by scurrilously criticizing networking schemes they're not involved in, or don't understand.

Experimentus Erratus Virus, caused by sharing illicit commercial software or firmware and not compounding the theft by using the company's copier to also reproduce the manual for the instructions on how to use it.

Abjectus Erratus Virus, a variant of the above, caused by not reading the manual stolen along with the software or firmware.

Illiteratus Erratus Virus, similar to the above, but caused by not reading the instructions that came with licit software or firmware.

Broadcastus Misinformus Virus, distinguished by simply disseminating wrong information, usually acquired by careless practice of 2M Fone, but since some 2M operators are bi-modal, can be acquired by encountering a 2M Fone operator on packet.

Canus Inspectus Virus, is one which compels an operator to make the rounds of the foreign BBSs, nodes and fireplugs (at least 200 miles away), listing the messages and sniffing the nodelists, perhaps to see if anyone else with this virus has been there. It is distinguished from normal operation by lack of any useful purpose or intention to establish lasting relationshipe. This is a variant of the Thomus Felinus Virus.

Obstreperous Operatorus Virus infects operators who absorb excessive nonionizing radiation. It gives them the illusion of being the first who did anything and the only one who knows how to do it right. (It also gives them license to write for the C&E.)

Happy April! Joe, K5JB

Ole Jive NET Program

I just wrapped up a distribution package of the TCP/IP program I run (and maintain) for the Tucson Amateur Packet Radio (TAPR) library. It is the old NET program, which runs in MS-DOS and Unix and is much smaller than the current NOS program most people use. It is more suitable for a multitasking packet station like mine.

Last month I mentioned how I had added ROSE circuit capability to the program. Well, after a month of testing and combing through the code to recover some of the space lost to the ROSE addition I managed to come out with the code a little smaller than when I started and even with a couple of neat additional features thrown in.

By the way, the ROSE addition works fine except for one thing: It can't force the stations on both ends of a circuit to coordinate what they are doing and unless they agree to a circuit plan, ROSE don't work. That is kind of Un-American, at least Un-Amateur Radio...

For some time I had eyed a way for a non-IP station to access the mailbox without having to use NET/ROM, or having to issue an information frame before getting the prompt from the mailbox. (The reason for the information frame requirement is that the protocol identifier, or PID, is not present in a SABM frame. And we don't want the IP station spitting out a mailbox prompt to everyone who connects.)

Prior to my getting the code, there was a way to make it work with a secondary call sign if you were running Unix and a mailbox process written by W2XO. The process that took place when that secondary call sign was used required a lot of code and I just didn't think it was worth the trade-off. While adding the ROSE capability I spotted a way to enable the secondary call sign with only a couple of hundred extra bytes of code, so I did it.

Also, another annoyance was the long, tedious, command lines that must be typed to change routing, or such, and the effect of making a typo. Drat! I hated retyping those lines. I simply added a list line recall so I could recall it and edit it to either correct it or make a different command out of it. I stopped short of adding a history buffer that would recall the last batch of commands one, by one. I'll let the NOS programmers add that to NOS. Anyway, this is the first release since last December, and it should last for a while. Joe, K5JB

FLASH

ANNOUNCING THE GREAT PLAINS AMATEUR RADIO CLUB'S ANNUAL

EYEBALL QSO

and

SWAPFEST

MOORELAND, OKLA.

Saturday, April 4, 1992 *** 12:00 PM till ???**
Sunday, April 5, 1992 *** 9:00 AM till ???**
VE Testing Saturday starting at 2:00 PM

DIRECTIONS: North on Main Street. Cross the tracks. Turn West and go 3 blocks to city park. Shuttle service from Mooreland Airport.

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Bring your family, covered dish, your own place settings and GOODIES TO SWAP!

ELECTRONICS REMEMBERED

From Yonkers Amateur Radio Club, via Worldradio

What does the year 1948 mean to you? The year you graduated from high school, perhaps, or entered grade school, or put together your first crystal set....?

As a ham, forget these and recall it for the revolution in technology that was adumbrated in the paper of John Bardeen and Walter Brattain when it appeared in a technical journal in July of 1948. That article, "The Transistor, a Semiconductor Triode," announced the results of a series of experiments in semiconductor research concluded at Bell Labs the previous December. What was produced by the two scientists was the "point contact transistor" (ie., two cat's whiskers" in contact with a germanium crystal.) This device could duplicate and supersede the amplifying characteristics of the vacuum tube triode. It was called the "transistor" (so named by their colleague J. R. Pierce) - one of the major inventions of the twentieth century.

Of course semiconductors and their properties had been the subject of research even in the early days of radio telegraphy. The first semiconductor rectifier was the crystal rectifier or so called "cat's whisker," namely, a flexible wire in contact with galena, an ore of lead in the form of lead sulfide. By moving the contact point on the surface of the crystal and tuning the variable capacitor of an LC circuit, maximum signal was delivered to a headset.

Such early solid-state research came to an abrupt halt, however, with the inventions of Fleming (vacuum tube detector) and de Forest (vacuum tube triode) in the first decade of this century. The advent of the triode as an amplifier, in itself a revolution, was soon to launch the era of broadcasting.

Over the years the disadvantages of vacuum tubes had prompted renewed research in semiconductor characteristics. After all, tubes were not only bulky and breakable, but consumed considerable power in driving electrons from the filament (cathode) to the plate (anode.) Moreover, tubes became unreliable as emission characteristics changed or the delicate grid structures became subject to shock or vibration. The task, therefore, became one of simulating the passage of electrons across a vacuum from a filament to plate via a grid in the tube by causing electrons to travel through semiconductor material. This scientific journey, however, was a slow one, characterized more by hypothesis than scientific fact. In other words, during the 1930's and 1940's, basic work in physics and semiconductors had to be done before an as yet hypothesized grid could be introduced into the semiconductor and thus achieve a controlled amplification effect.

Germanium, an intrinsic semiconductor, was the choice of researchers. It was found that this metal became conductive when tiny amounts of certain other elements or "impurities" (gallium arsenide, for example) were added to it to cause electrons to move readily to the conduction band via the now familiar donor-acceptor covalent bonding.

The search proceeded in several countries and during WW II germanium rectifiers (i.e., point-contact diodes) were produced for use in radar systems as a substitute for tubes. But it was the two Bell Labs inventors, the 40-year-old Bardeen and 46-year-old Brattain, who, spurred on by the product requirements of AT&T, made the great breakthrough with the point-contact transistor in 1948. Indeed, in the next year an invention of comparable importance was made by their former colleague William Shockley when he linked his fame to theirs with his independent development of the theory on p-n junctions and its application to his own p-n-p sandwich, the "junction transistor."

But that was only the beginning of the story. No bells or whistles sounded that gave witness to these great electronic achievements. At least the New York Times reported the first public demonstration by Bardeen and Brattain of the properties of the transistor at Bell Labs (then at W. 43rd St. in New York City) in its issue of Thursday, July 1 - but in the entertainment section on page 46, stuck in among more important(?) details of the popular radio comedy shows (page one headlines, incidentally, were busy recording the demise of the original nickel subway fare on that day. Nor did the Science section on the Sunday paper elaborate on the discovery.)

The transistor, therefore, was only an intellectual curiosity that was yet to make the leap from the laboratory to the factory bench. Western Electric didn't produce AT&T's first point-contact transistor until late 1951, and for another year or so there was no commercial product utilizing the transistor to whet the public's appetite.

Initially there were problems - the extreme difficulty of controlling impurities in the semiconductor material, questions of engineering design and production, and frequency and current limitations. Moreover, by the time transistorized hearing aids (an obvious choice for electronic miniaturization) began to appear in quantity in 1953, the transistor itself cost about eight times that of the corresponding vacuum tube (transistors were then assembled under the microscope using tweezers!). But progress thereafter was swift, as advantages became ever more apparent as compared with vacuum tubes: greater power efficiency and reliability, longer useful life and inherent ruggedness, lower noise level at higher frequency input and, not least, minimal size construction.

APRIL

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2 AERONAUTICAL CENTER ARC	3	4
5 GREAT PLAINS WHEAT STRAW Daylight Savings Time Begins	6	7 M O R I	8	9 ALTUS ASSOCIATION CIMMARON ARS	10	11 SCARS
12 E A R S	13 EDMOND CLUB	14 BICENTENNI/ (76ers)ARC	15	16	17	18 V H F
19 Easter Greetings	20 VE TESTS 6:00 PM *SALVATION ARMY* 50 & PENN	21 AUTO PATCH	22 Edit C & E	23	24	25
26	27	28 C O R A 7:00 PM *SALVATION ARMY* 50 & PENN	29	30	31	

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