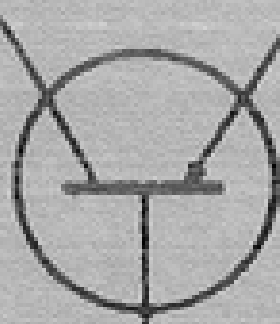


CENTRAL OKLAHOMA RADIO AMATEURS  
**COLLECTOR AND EMITTER**



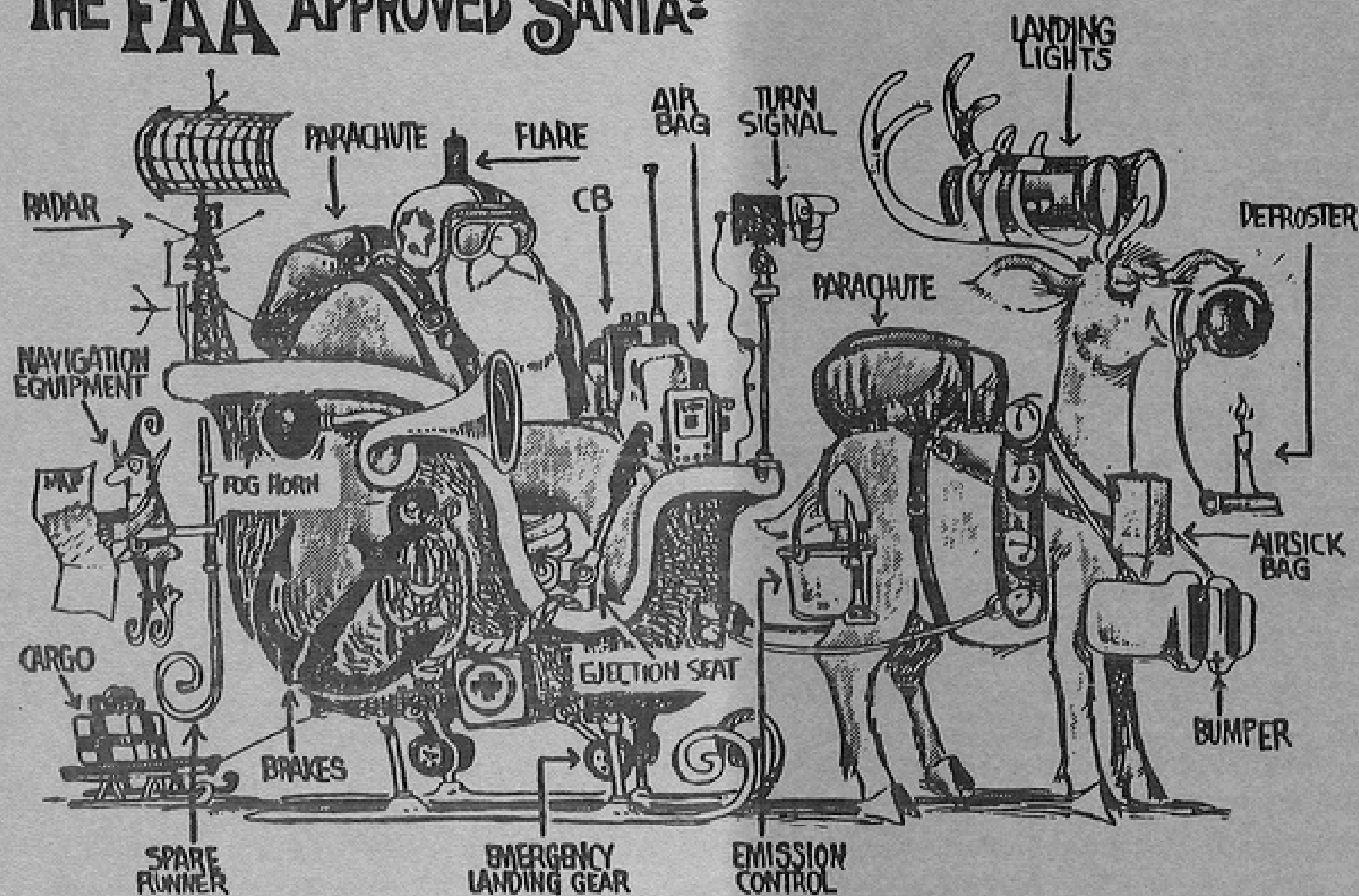
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Second Class Mail

December 1993 Volume 19 Issue 11

# Happy Holidays

## THE FAA APPROVED SANTA:



# C.O.R.A. TREASURERS REPORT

NOV. 23, 1993

## HH '94 ACCOUNT

OCTOBER BALANCE \$3,248.21

## SCHOLARSHIP ACCOUNT

OCTOBER BALANCE \$1,131.66

## Collector and Emitter Account

OCTOBER BALANCE \$2,931.39

11/16/93 CYNOAK PRINTING (\$189.75)

CURRENT BALANCE \$2,741.64

CHECK BOOK BAL. \$7,121.51

PETTY CASH \$ 9.25

TOTAL ASSETS \$7,130.76



## Editors-

Scott Walsh, N5NYS

Joe Buswell, K5JB

Editor Emeritus

Joe Harding, WA5ZNF

## CORA-

Rick Masters, N5WNR-President

Kathy DeGraffenreid, AA5RU-VP

Jim Buswell, N5BEQ-Secretary

Tom Mangham, K5LDI, Treasurer

Dear Subscriber,

PLEASE help us keep your information up to date. Check your entry on the back page. If there appears to be a mistake, check with your club officials and have it changed.

Dear Secretary/Treasurer,

When you want a change of any sort to your membership, you must fill out completely a subscription slip. Watch for the date you received their money and the date the subscription expires. Have your slips, or a list of deletions submitted by the 22nd each month. If there is anything about C&E subscriptions you need to know, please contact us.

Story information, as well as letters to the Editor should be sent to:

Scott Walsh, N5NYS

600 Annwood Dr.

Yukon, OK 73099-2088

or left in their entirety on the BBS at (405)354-3241, N81, 1200-14.4k. You can also leave your article in N5PHW's mailbox on 145.03 or get in touch with K5JB on 145.01 packet.

CORA Collector & Emitter

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As many of you know, the annual election of MORI officers took place at the October meeting. There was very little change within the club leadership. the officers for 1993/94 are: President: Scott Walsh, N5NYS# Vice-Pres: Larry Benedict, N5VYC Secretary: Earl Draper, KJ5HN! Treasurer: Robert Moose, N5QKI Editor: Dean Ward, N0PAD MORI is very grateful to Tim, N5USM for his past year of service to the club as Secretary. MORI will soon have a new 2m repeater on in Seminole within a few months. This repeater will be linked to .925 all of the time. Once up, mobile coverage towards the east on I-40 will be greatly extended. A packet node MORI2 is now on the air near Seminole and permits continous access to the CLAYTON TexNet node.

The .925 repeater is now transmitting from its new home at 1120'. A few mobile stations have checked in from as far away as Enid. As many of you know by now, the 145.21 repeater is now on the air. Until we can find a controller for the repeater, please identify the repeater. For example just say "This is KB5XYZ on the N5VYC repeater" every 10 minutes.

Here is a list of the nets held on the MORI repeaters. MORI Prime Time Net Sun, Mon, Wed @ 7pm on .67 Gaming net Sat @ 11pm on .67 SW OK YL Roundup net Mon @ 9pm on .925 +SPARS/Lawton Arc Net Thursday @ 9pm on .925

MORI will have a Christmas Dinner this year and is scheduled for December 14, 1993 at Eastminister Presbyterian Church at 1801 S. Sooner Rd. There will NOT be a regular business meeting in December. MORI will provide the meat and the side dishes will be provided by members. If you wish to attend the Christmas dinner PLEASE call Toy, AB5ET at 632-0225. Monthly VE Testing is held the

FIRST Sunday of every month at 2pm at Hillcrest Methodist Church (5751 S PENN). Contact Toy, AB5ET for more info. (At last count, our membership is at 220! Thanks to everyone for coming out to the meetings and participating in many of our activities. 73 de Dean, N0PAD (N5QKI contributed to this article)

### THE CW NET IS COMING!!!

Make your New Years resolution to learn Morse Code and increase your copy speed to five words per minute now. The CW Net is slated to begin operations on Thursday January 6th at 8:00 p.m. on the MORI 145.210 repeater. You will need a code key oscillator to fully participate in this net as it is an "interactive" net. The lesson plan spans 14 lessons given over 14 weeks, with each lesson being given two, perhaps three times per week on Tuesday, Thursday and Saturday. The lessons are designed to teach the code as well as help build copy speed up to 5-7 words per minute. For complete information about the net, as well as a copy of the 14 week lesson plan (so you can study ahead!) send an SASE to AB5MI at P.O. Box 1030, Bethany Oklahoma, 73008. I hope to hear you on the air with us Jan. 6th! Good luck and 73 de AB5MI.

### NOVEMBER MINUTES

November 2, 1993

The meeting was called to order at 7:05pm by Scott Walsh, N5NYS.

The minutes of the October meeting were presented by Earl Draper, KJ5HN.

A motion to accept the minutes as presented was made by N5PHW and seconded by K6VPE; the motion passed.

The Treasurer's report was presented by Robert Moose, N5QKI, indicating a balance of \$1,055.05. A motion to accept the Treasurer's report as presented was made by N5WNR,

seconded and passed.

The VE report was presented by AB5ET. VE Testing 1st Sunday each month at 5771 S. Penn, 2:00pm.

The Foxhunt report was given by KJ5HN. Foxhunt held each Saturday night at 7:00 on 147.47.

A report on the Christmas dinner was given by AB5ET. Dinner to be held Dec. 14 at 1801 S. Sooner Rd. Entertainment 6:00, dinner 7:00.

The CORA report was given by N5WNR.

The Technical Committee report was presented by N5VIS.

A special session was then called by N5NYS for selection of a club logo. A club logo was selected by ballot from a group of six.

### OLD BUSINESS

Southside coffee scheduled each Friday at 9:00pm, at Denny's I-240 & Penn.

### NEW BUSINESS

The CW practice net is in advanced planning, should be operating within 45 days on 145.21.

N5VIS announced that the joint MORI/EARS field day station placed third in the state.

N5QKI proposed purchase of a second phone line for an autopatch on 146.925 sometime in December. Motion to accept by N5SAM, second by N5WNR.

The meeting was adjourned at 7:57pm.

Earl Draper KJ5HN, Secretary

# EARS

Well, the November elections, also known as the Great Train Ride of 1993, are over, and it's time to congratulate the newly elected board members for the next year. It's also time to offer condolences to those who, in the words of some famous person, have had greatness thrust upon them.

The new officers are:

Pres. Lee Vaughn  
VP John Thomason  
Sec. Kay Sage  
Treas. Penny Stepp  
Board Members at Large  
Richard Wynnard  
Brad Keispart  
Past Pres. Ken Stepp

Here's to a good year everyone... I'm sure you'll all do a super job.

Christmas Dinner. Edie Vaughn is organizing this year's Christmas Dinner, which will be held at St. John's Catholic Church in Edmond on December 18th. Anyone who is able to help is greatly appreciated. P.S... I have some fairly reliable information that Santa Claus is going to visit us again this year, so bring the kids and come on out.

Congratulations also go out to Frank Tassone and his wife on the birth of their daughter in Edmond on November 9th (I believe the date is right -- if it's not, I apologize Frank, but you kept your little surprise such a big secret that I didn't even find out about it until I read it in the newspaper of all things!) For those of you who are even remotely interested, Mike and I are STILL expecting a little addition of our own sometime very soon -- hopefully by the time you read this article.

Well, folks, it's time for me to sign off for the final time. It's been a great year for me... I've enjoyed myself thoroughly. Thanks for letting me bend your ear once a month. Take care, and as always...

Later! Terry, KB5RQT

## MINUTES OF THE OCAPA MEETING November 16, 1993

The meeting was called to order by Brad KJ0W at 7:30pm.

The minutes of the last meeting were read by John N5SAM, seconded and passed.

Treasurer's report was read by Mike N5VIT, seconded and accepted.

## CHRISTMAS PARTY COMMITTEE

The Christmas is in the final planning stages. Mary KB5VNP is the food coordinator with white elephant gifts, the conclusion of the Christmas raffle and entertainment by Wally N5WPE.

The meat dishes are furnished by the club. Dinner starts at 7pm.

The GRAND PRIZE is an ICOM IC-229H 2 meter rig.

## WEATHER COMMITTEE

John NJ1V is currently working with Channel 9 to organize the February severe weather training meeting.

## CORA

Chuck K5NK reported that John NJ1V will secure the facility at the fairgrounds for Ham Holiday 94.

## TECHNICAL COMMITTEE

Mike KB5WIC recommended the purchase of a circulator to purify our signal.

He will research availability and price.

## OLD BUSINESS

Tom WA9AFM got three volunteers to review the by-laws of OCAPA. Hal KB1ZQ, Mac K2GKK and Gene KJ5GX will make recommendations at the next business meeting.

## NEW BUSINESS

Dale AB5MP explained the dangers of carrying 12v ht batteries in your pocket with keys and change. Beverly KB5YHX, his wife, told us his pants had burn holes in them and were not repairable. The November prizes were: an ARRL Reflections book (donated by Gene KJ5GX) to Ron KA5RVM, an ARRL Handbook to Don N5ENQ, an ARRL Repeater Directory to KA5RVM, an ARRL Antenna Compendium to Tom N5TCG, and a G5RV antenna to Brad, KJ0W.

## ATTENDANCE 39

Meeting adjourned

John Brassfield, N5SAM

Secretary

EARS-  
Christmas Dinner  
Dec. 18th  
St. John's church  
  
OCAPA-  
Christmas Dinner  
At Warr Acres  
Community



VHF Club  
**NEWS**

W5LOW  
The Elmer Goehler Memorial  
Station

### Minutes of November Meeting

Meeting was called to order, at 12:02 P.M., by Secretary Joe, K5JB, because President J, KB0QJ, was on the sick list. There were 21 members and guest present.

Motions passed accepting the minutes as published in the Collector and Emitter, and accepting Treasurer Ellard, W5KE's report.

Another member is on the sick list. Charlie, WA5JGU, gave a report on Bob, W5HXL, who had lung surgery this week. Charlie reported that Bob was doing pretty good under the circumstances. (Next morning he reported on the Oklahoma Phone Emergency Net that Bob was out of Intensive Care and had been moved to a regular room in Baptist Hospital.) Sorry to hear about this, Bob, and I join all the other members in wishing you a quick recovery!

Fred, W5NL, reminded the group about the QCWA/VHF Club 2M net. It meets every Thursday at 7 P.M. on the CD Repeater, 145.41 MHz. Fred circulated a note from Ken, K5VFN, which said, "Open to all with current license and who have desire and memory!"

The members of the VHF Club want to wish all the amateur radio operators out there, and their families, the very best of Seasons Greetings, and hope for a wonderful new year! Joe, K5JB, Sec'y

### Umm, Thanksgiving?

Sure I know when it is, why did you ask? Oh! The C&E Calendar! Well let me explain. You see, I have been using this kiddie program to do the calendar and didn't check it over too closely. Blush! I will surely have to check it over more closely from hereafter. I copy the clubs as a group and make a start on the next

month's calendar while I can still remember how to do it. When I tried to do a January 94 calendar I found out my program would only make calendars for 1993. Oh well, I didn't pay much for it. It came in a bundled kit for beginners and I guess whoever bundled it figured I wouldn't last beyond the year.

Speaking of the calendar, and other things in the C&E. I only put in the thing what people tell me, or I read in the C&E. If your club information is wrong, tough! Call me and tell me what it should be. I am no mind reader, ya know!

### Packet Racket

Last month I got really wound up telling about the technical side of sending packet radio data with a "segmentation" protocol. I reread that article to make sure I didn't unnecessarily repeat myself this month and noticed several typographical errors. I guess I *really* was in a hurry. LAPB is *Link Access Protocol, Balanced*. I made a technical error in describing the composition of a packet containing a TCP/IP frame. Each 256 byte packet contains 20 bytes of IP header, 20 bytes of TCP header, and 216 bytes of user data. In last month's column I used the 236 figure for user data because that is one of the numbers that IP works with; it considers the TCP header as part of the user data. TCP, the transmission control protocol and is responsible for shipping the data from the user's application and making sure it is received intact. IP, the internet protocol is concerned with finding the other station in the first place and shipping stuff to him.

This reminds me, I had a nice, short, chat on packet with Shirley, W5SIAT, who has the ROSE switch in Noble. She had left a note in my mailbox with some remarks about last month's column. In that short chat I explained to her what TCP/IP was, so it can't be too complicated. In a future column I will explain it in the context of amateur radio. Most people who work with TCP/IP are computer people and they can't fathom the problems in getting data shipped around with radio, and its unpredictable performance.

I'll be the first to admit that I am a tinkerer, and have boundless curiosity. TCP/IP is great for the tinkerer, and for one who wants to learn more about how computers communicate and transfer information. Ever since I got my new KIM-1 with the 256 bytes of memory I have been looking for new applications to which I can put it, like writing this column for the C&E!

Since the last article, I dug further into NET, the TCP/IP program I use on the MS-DOS and Unix computers. I was doing close examination of the way it was doing the AX.25 protocol and couldn't help noticing some things it was doing wrong. I *really* lack time to go into it this month so maybe in a later issue I will explain the details. For those of you who are already familiar with AX.25 in packet radio I will simply say that I reworked the code to correct some timing problems that relate to modern busy frequencies, and modified NET to enable it to revert to version 1 of the protocol. In the older version 1 protocol, if a transmitted frame is not acknowledged it is just retransmitted, instead of sending a poll regarding the unacknowledged frame, receiving a response from the poll, and then retransmitting the original information frame. I think that the older protocol has enough merit that I decided to make it work so I could see. One attempting to use NET on HF would use version 1.

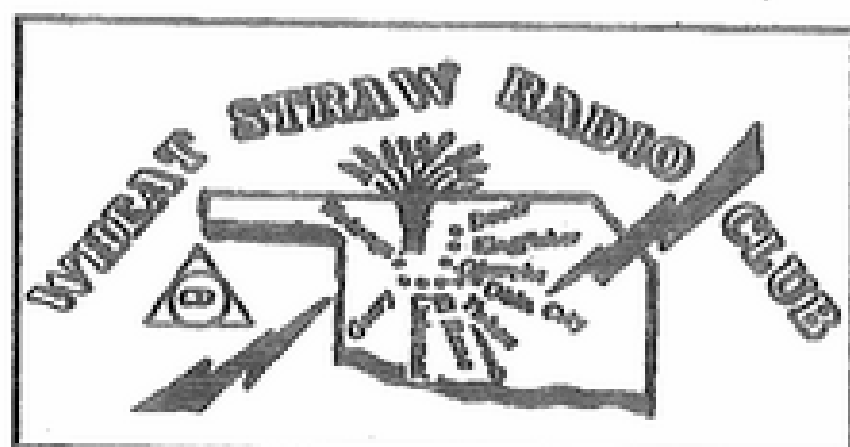
The timing improvements were immediately noticeable on Netrom and ROSE networks where data flow is pretty slow and the computer must be severely reined in lest it choke the network.

Unfortunately, I had already prepared a release of the software to be put in the Tucson Amateur Packet Radio (TAPR) library. I am considering holding that release and updating it after I have time to more thoroughly test the changes.

I sincerely hope that the holiday season finds you happy, warm, and comfortable and that the new year brings you an abundance of amateur radio cheer!

Joe, K5JB





### Wheatstraw Meeting

The November 14 meeting was called to order by Vice President Neal, N5KCO. Ray, AB5Z, was absent; Sue, KB5TNE, was not feeling well. Get well Sue!

The meeting was held in Dover and had several sponsors. I give Wanda credit for making the arrangements.

We had twenty five present. Jim, K7UAN, was at the meeting and it was good to see him again. In fact, Jim is moving to Dover; he was partially moved by November 14.

John Fish, K5GBN, had been out tuning up the repeater again. He and George, K5GGL, have done a wonderful job taking care of the repeater. We appreciate them. The club voted to pay for Christmas dinners for Johnny and Margaret.

The Christmas dinner and next monthly meeting will be at the End-O-Main December 12. The dinner will cost seven dollars each. If you wish to attend please check in on the Wednesday night net at nine P.M. We need a head count. If you can't check in ask another person to check you in and give the information on how many will be in your party. Christmas dinner will start serving at 1:30 P.M.

Then came the nominations for the 1994 officers. They will be elected at the December 12 dinner. For President, Joe, WA5GHK, nominated Ray, AB5Z. Leo, WZ5H, nominated Joe, WA5GKK. For Secretary and Treasurer, Joe, WA5FLT, was nominated. For Reporter, Margaret nominated Ralph, WA5PFK. You must remember there can be more nominations made at election day.

Leo, WZ5H, reported that he measured another one of his turnips at twenty one inches circumference!

Before adjourning, Father Joe, W5JEB, and Wanda entertained the club with some interesting trivia questions. Then meeting adjourned for those delicious refreshments, for which we give a big thanks to all.

### Ralph's Reflections

Isn't it strange that Abraham Lincoln once walked nine miles to borrow a book, and that now they close the library on his birthday?

Why is a newspaper ten times more interesting when someone across the table is reading it?

Economists report that a college education adds many thousands of dollars to a man's lifetime income, which he then spends sending his children to college.

The rural doctor came out to the farm to check on the farmer's wife. Upon arriving, the doctor felt thirsty. He walked over to the well to bring up some cool water, but he slipped and fell in. The moral of the story is that a doctor should take care of the sick, and leave the well alone.

Once upon a time a lion ate a bull and he felt so good that he roared and roared. Upon hearing the lion, a hunter came and killed the lion with one shot. Moral: When you are full of bull keep your mouth shut!

### How Big Was She?

The farmer remarked to his six year-old nephew visiting from the city, "Look at that pig over there. She's a big one, isn't she?"

"She ought to be," answered the boy. "A little while ago I saw 10 little pigs blowing her up!"

### From the W5YI Report

Here's a follow up on Terry Van Sickle, WB5WXI, who was caught talking on the frequency allotted to McDonalds. Van Sickle was a graveyard video journalist. He discovered the frequency that McDonalds was using, tuned his trans-

mitter and used it to attack with rude and offensive talk.

The manager reported it to the FBI. Van Sickle pled guilty, and can be sentenced for one year imprisonment, a year of supervised probation, and followed by a \$100,000 fine.

Van Sickle agreed to surrender his equipment, all interest in it and ownership of it, to the government. The confiscated equipment was worth \$15,000. He should have popped himself some popcorn and stayed home.

### Our Elderly in Retirement Units

He sits there waiting patiently and wipes away a tear, wishing that a visitor would suddenly appear,

Someone to say, "How are you?" and greet him with a smile, someone to sit beside him and chat a little while.

It's hard for him to understand just what he is doing there. What happened to his family, and friends who used to care?

Why has he been abandoned like some old worn-out shoe? What crime has he committed? What bad thing did he do?

True, he has a bed to sleep in and he's sheltered from the rain, but there is little else to ease the loneliness and pain.

He's only one of many in an oldster's home today, who finds the price for longer life is much too high to pay.

That picture could be quickly changed, if all of us would spend some extra time just visiting, a relative or a friend.

Who's shut away from all the things that once were held so dear, and needs to be reminded that at least someone is near.

To take him/her by the hand and say, "How are you?" with a smile, and sit close beside him/her and just love them for a while.

I hope this gives you an idea of how you could provide a really meaningful Christmas present to someone. I am sure we all are having a wonderful Thanksgiving; let us all make a very Merry Christmas for someone you know.

**The Humble beginnings of  
The Jolly Old Elf**  
By Faye Lacy Miller

Did you ever wonder how we got the image of Santa Claus?

The Santa we have today came from the imagination of Clement Clark Moore. Up until 1822, when Moore wrote a poem for his children, Santa was tall, thin, and wore a blue suit.

Moore described Santa as a, "Jolly Old Elf" with a red suit, and he also named the reindeer. He kept the poem a secret because he was embarrassed, as he had been a classic writer. He taught at Columbia University for 29 years.

His writings had always been "serious", until one Christmas Eve he wrote a poem for his children. Also known as 'Twas the Night Before Christmas, Mr. Moore was best known for this poem.

**A letter to Santa Claus in 1939**

Dear Santa Claus,

I am a little girl 7 years old. I help my mother wash the supper dishes every day. Will you bring me a sled, a doll, color book, and a Dizzy Donkey pop-up, some candy, nuts and fruit?

And don't forget my brother. He wants a jigsaw. Please remember the poor children.

Your little girl,  
Waneta Jean Rhodes

Maybe I am still just a kid at heart, but I still believe in Santa Claus, and the love of Christmas. If you read this, it is a message to you.

Have a Merry Christmas and keep the joy in your heart. Ralph, WA5PFK

**Powerful NiCds**

The following was suggested for the C&E by Dave, KD5FX, and I agree that it contains information worth repeating. It is a bulletin that has been floating around on the packet radio bulletin boards

Joe, K5JB

***WARNING to Alinco HT Users and  
Other Users of Rechargeable Batteries***

This is a *very serious* warning to all users of Alinco HT's, especially those using DJ-180 and DJ-580 models. The warning is also for ALL other users of *rechargeable battery powered equipment*. Please *carefully read and understand* the contents of this notice.

The charging terminals on the batteries used on at least the two Alinco HT models listed above present a *serious danger*. The terminals are *not* diode protected against external short circuits. The manual provided with your Alinco radio points this out, but definitely without enough emphasis and description of possible consequences.

Aaron Douglas, N9UBF, (my son) dealt with a nearly disastrous situation on Saturday, October 30, 1993. His Alinco DJ-180T handheld 2-Meter radio was on his bed along with items from his school bag. One of these items was a common spiral-bound notebook. Somehow the radio (or the notebook) was moved around on the bed until the two charging terminals of the battery were shorted by the wire spring which makes up the binding of the notebook. *Within ten seconds* the battery case and the wire spring were so hot that the paper of the notebook and the blanket surrounding it were *burning!* The case of the battery pack was partially melted. Just ask Aaron to show it to you, and you will be astounded.

Fortunately, Aaron happened to be on the bed and noticed the smoke and small flame in time to extinguish it and prevent much more serious consequences. I am absolutely positive that if this had happened with nobody around, my family and I would be without a home today.

Think how serious this could be if the battery were placed in your *pocket* along with keys or change. I guarantee you that you would *not be able to get the battery out fast enough* to avoid a serious burn. When Aaron took the battery outside to cool, he could barely hold on to it, and

this was *after* removing the short circuit.

I, as a result of our experience, *high recommended* the purchase and use of a soft case for the Alinco HT's. A suitable case should be purchased or made for any spare batteries you may have as well. An alternate to the use of a case is to *never* place the radio or spare battery on any surface other than something like a hard table which is clear of conductive junk.

You probably are asking yourself: "How can a small low voltage battery pack which we all use be so dangerous?" It is because the type of batteries used in most HT (and other portable equipment) battery packs is a type called Nickel-Cadmium (commonly called Ni-Cad). All Ni-Cad batteries characteristically have a very low internal resistance. This means that the batteries can deliver extremely high levels of current when externally short circuited. Actually, this characteristic is really what makes Ni-Cad batteries so good for use in applications with a high current requirement such as radio transmitters, motorized tools and toys, etc. We just need to be aware of the possible problems associated with Ni-Cad batteries.

It just so happens that most Ni-Cad battery packs don't normally have exposed charging terminals connected directly to the batteries like the Alinco packs do. The Yaesu FT-23/73 family, for example, uses an internal diode to block current flow if the *charging terminals* are externally shorted. To test whether or not your HT battery pack charging terminals are safe or not, use a volt meter to measure voltage at the charging terminals of a fully charged battery pack. If you read a voltage, you have a dangerous situation like that described above.

**CAUTION:** Almost all Ni-Cad battery packs have exposed terminals when not connected to the radio or other device they are intended to power. Thus all precautions outlined in this article apply to almost every Ni-Cad battery pack which is separated from the device it goes into. *Be safe* and Prosper. Skip - KA9DDN

<b>1. Aeronautical Center ARC</b> Meets: First Thursday, Flight Standards Building, FAA, South MacArthur, 7:00 P.M. Pres: Jack Iman, WB5SVN Sec/Tr: Brad Nelson, KJ0W AstVP: Harold Todd, WA5VAQ 685-3685 AstVP: Charlie Greene, WA5JGU 943-5631 Editor: Jack Iman, WA5SVN	<b>6. Altus Association</b> Meets: 7:30 P.M. Second Thursday North Main Fire Station (CD), Altus Pres: Jim Romines, K15YY VP: None Sec/Tr: Bob Heron, KE4BN Editor: Jim Romines, K15YY	<b>14. Cimmaron ARS</b> Meets: 7:30 P.M. second Thurs. WXSY Playhouse 827 S 13, Fairview Area code 405: Pres: Terry McColl, N5MLT 227-3672 VP: John Medley, N5WVU 227-3534 Sec: Dennis Panton, WK5V 764-3599 Treas: Nadine Panton, N5FMH 764-3599 Editor: John Medley, N5WVU 227-3534
<b>2. Oklahoma Central VHF ARC</b> Meets: 11:00 A.M. 3rd Sat., Golden Skillet 3401 N. Classen Blvd, OKC Pres: J Frank Fields, KB0QJ 789-8469 VP: Bill Noland, WA5FWD 354-5018 Sec: Joe Buswell, K5JB 732-0676 Treas: Ellard Foster, W5KE 789-6702 Editor: Joe Buswell, K5JB 732-0676	<b>9. Wheatstraw ARC</b> Meets: 2:30 P.M. 2nd Sunday, Location Varies. See club section for details. Pres: Ray Barnes, AB5Z, Longdale 274-3334 VP: Neal Kappus, N5KCO 262-1551 Sec/Tr: Joe Garland, WA5FLT, Calumet 893-2660 Editor: Ralph Wilder, WA5PFK, Watonga 623-5421	<b>15. South Canadian ARS</b> Meets: 9:30 A.M. Second Saturday, Red Cross Bldg. North OU Campus, Norman Pres: Don Schader, K15TP 321-9649 VP: Mike Winkel, N5SOF 366-8639 Treas: David Gates, N5LCL 392-5677 Sec: Gary Skaggs, WB5ULK 799-5363 Editor: Gary, WB5ULK & Ken Brown, N5KUK
<b>3. Mid-Oklahoma Repeater, Inc.</b> Meets: 1st Tuesday, 7:00 P.M., Favorite's Cafe 36th & S. Western, OKC Pres: Scott Walsh, N5NYS 787-3804 VP: Larry Benedict, N5VYC 728-7824 Sec: Earl Draper, KJ5HN 787-1207 Treas: Robert Moose, N5QKI 720-0073 Editor: Dean Ward, N0PAD 681-4606	<b>11. Edmond AR Society</b> Meets: Odd months, 3rd Sun., 2:00 P.M. Edmond EOC; Dinner Even Months, 3rd Friday Pres: Ken Stepp, N5DBM 341-4874 VP: Bob Long, N5KUE 373-2540 Sec: Lynice Hamlin, KB5FOH 427-2828 Treas: Ed Granger, KB5DZU 348-3454 Editor: Bob Long, N5KUE 373-2540	<b>16. Edmond AR Club</b> Meets: 7:00 P.M. Second Monday, Various Locations Pres: Mark Northcutt, WD5DYI 755-4672 VP: Wendell Cochran, WB5ISO 943-4308 Sec/Tr: Kay Northcutt, WD5DYI 755-4672 Trustee: Dennis Orcutt, WB5ISN 340-0034
<b>4. OK City Autopatch</b> Meets: 7:30 P.M. Third Tuesday, Salvation Army N.W. 50th & Penn. PR: Brad Nelson, KJ0W 793-9470 VP: Tom Webb, WA9AFM 737-6716 Sec: John Brassfield, N5SAM 685-8070 Treas: Mike Begley, N5VIT 732-2827 Editor: Tom Webb, WA9AFM 737-6716	<b>12. Oklahoma Packet Radio Assn.</b> Meets: At Major hamfests, Green Country, Ham Holiday and Texoma Pres: Hank Blackstock, WA5JRH 722-0640 Editor: Hank Blackstock, WA5JRH 722-0640	<b>18. Great Plains ARC</b> Meets: 2:15 P.M. First Sunday, Home of N5LRR 2914 Osage Dr, Woodward Pres: Bob Bayles, WB0GAX, Wdwr 254-3561 VP: Andy Taylor, N5LRR, Wdwr 256-4017 Sec/Tr: Rod Ford, WB5OVT, Gage 923-7683 TR: Freida Patterson, N5EOX, Wdwr 256-2111 Editor: Phillip Perry, N5QCN 938-2453
<b>Central Old Radio Amateurs:</b> Meets: 7:30 P.M. 4th Tuesday, Salvation Army, Penn. and NW Highway, OKC (back door) Pres: Rick Masters, N5WNR; VP: Kathy DeGraffenreid, AA5RU; Sec: Jim Buswell, N5BEQ; Treas: Tom Mangham, K5LDI, 677-5291; Editor: Scott Walsh, N5NYS, 787-3804 Note that the original four clubs that formed CORA were Aeronautical Center ARC, VHF Club, MORI and OKC Autopatch.		

19 DECEMBER 93						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1	2 Aero Center	3	4
5 Great Plains	6	7	8 Hanukkah	9	10	11 SCARS EARS Dinner
12 Wheatstraw	13 EARC	14 MORI	15	16 Altus Cimmaron	17 <sup>18th</sup> EARS	18 VHF Club Sat. VE Tst
19	20 Test	21 OCAPA Winter Solstice	22 C&E Edit!	23	24	25 Christmas
26	27	28 CORA	29	30	31	