



THE SHORT CIRCUIT



April 2002

THE NEWSLETTER OF THE ARCTIC AMATEUR RADIO CLUB

The Arctic Amateur Radio Club (AARC), Alaska's first amateur radio club, was formed in Fairbanks in 1939 and was incorporated as an Alaska non-profit organization in 1966. We have about 250 members and we meet September through May at 7:30 p.m. on the first Friday of the month at the Geophysical Institute University of Alaska. All interested persons are invited to attend.

- | | | | |
|------------------------------|-----------------------|--------------------------|---------------------------------------|
| o Jim Movius | KL7JM | 452-6347
452-6349 FAX | President |
| o Linda Mullen | AD4BL | 488-7046 | Vice President |
| o Bill Beam | NL7F | 457-2727 | Secretary |
| o Cliff Cullings | AL7P | 479-6659 | Treasurer (Nov 8,'01
board action) |

○ Bob Ball	KL7AH	479-7785	Board Member
○ Rex Keirn	AL7BJ	457-4025	Board Member
○ Warren Tilman	KL0RA	474-9484	Board Member
○ Michael Drury	KL7GL	488-0660	Board Member
○ Eric Nichols	KL7AJ	488-0483	Board Member
○ Debbie Treb	WL7CRG	451-1911	Board Member
○ Myron Babcock	AL7QY	455-4925	Board Member, Past President

Minutes of Arctic Amateur Radio Club meeting April 5, 2002:

PREMEETING ACTIVITY

Swap session.

MEETING

Jim Movius, KL7JM, President, called the meeting to order.

Bill Beam, NL7F, Secretary, read the minutes of the previous meeting (Mar. 1, 2002.)

Jim Movius, KL7JM presented the Treasurer's report on behalf of Treasurer Cliff Cullings, AL7P.

Beginning balance

2/28/02 1,085.42

3/4/02

Transfer to gaming acct. <157.54>

4/2/02

Telephone bill <172.38>

Ending balance 4/2/02 755.50

COMMITTEE REPORTS

Linda Mullen, AD5BL advises that the next emergency services meeting will be held April 23. Training sessions are to be scheduled. For further information contact Larry Ledlow, N1TX at <n1tx@amsat.org> or 488-8399.

Linda also summarized the AARC Yukon Quest Race activities.

John Slater, KL1AZ advises that the latest Repeater report is published in the last Newsletter.

John also invites any submissions to the Newsletter to his e-mail <slaternorthp@mosquitonet.com>. Be sure to include your radio call or reference to AARC in the subject line so that he doesn't filter the message to his trash bin....

ANNOUNCEMENTS

Rex Keirn, AL7BJ announces the death of Nathan O. (Nate) Smith, KL7DJE of Palmer, Alaska. Nate was active with the Snipers Net.

Rex also advises that an exam session will be held at the Borough Library tomorrow Sat., April 6 at 1:00 PM.

Jim Matthews, WL0JM announces that the Fairbanks Area Lions Clubs will hold their Annual Recreational Equipment Recycling Sale at the Farmers Market on College Road Saturday, April 27, 9:00 AM to 4:00 PM. Donations or consignments can be brought to the Farmers Market Thursday, April 25 or Friday, April 26 from 2:00 PM to 8:00 PM.

Jim Movius, KL7JM Advises that an appreciation party for Quest Race volunteers will be held at Ivory Jacks Sunday, April 7 from 5:30 PM to 8:30 PM. All volunteers are invited.

Steve Estes, KL7XO announces that the Alaska Interior Net which meets on the KL7KC repeater every Sunday evening will become the official ARES Net.

The next Board of Directors meeting will be hosted by Warren and Linda Tilman, KL0RA and KL0TU at 7 PM, Thursday, April 11 at 1105 Coppet St.

MAIN PROGRAM

The main program was a presentation by Jim Movius, KL7JM of antenna modeling using NEC (Numerical Electromagnetic Code).

Meeting adjourned.

Submitted by

Bill Beam, NL7F
Secretary

Board Meeting Minutes:

Minutes of AARC Board of Directors meeting April 11, 2002.

Meeting hosted by Warren and Linda Tilman, KL0RA and KL0TU .

Board members in attendance:

Mike Drury, KL7GL Rex Keirn, AL7BJ Bill Beam, NL7F Bob Ball, KL7AH Warren Tilman, KL0RA
Linda Mullen, AD4BL Myron Babcock, AL7QY Deb Treb, WL7CRG

Other club members in attendance:

Bill Mullen, KE4ITP Linda Tilman, KL0TU Steve Estes, KL7XO Dianne Marshall, AL7FG

Meeting called to order by Vice Pres. Linda Mullen, AD4BL.

Minutes of last board meeting (March 7, 2002) presented by Sec. Bill Beam, NL7F.

Treasurer's report presented by Bill Beam, NL7F on behalf of Treasurer Cliff Cullings, AL7P. In summary:

Beginning balance 2/28/02 1,085.42
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COMMITTEE REPORTS

Deb Treb, WL7CRG reports for the Repeater Committee:
Repeater Report
Date: Mon., 1 Apr 2002 17:50:44 -0900

The following repeaters are out as of now.

Healy: Healy was causing interference to the entire repeater system and was turned off.

We do not know here or how the Healy machine is getting into the system ...We have a mystery...either it is being cross banded or we have the strangest failure I have ever seen. We shall keep plugging away at it.

We are going to change the PL transmit tone from Healy to 192.8 Hz and change the McKinley Rx tone input to 192.8.

If this path is there (and the band pass of the Rx will allow the input) the tone change will prevent any input to the Dot Lake RX.

The other possible input could be the 223.82 transmitter from Healy getting into the 223.22 Rx at Dot Lake ... the problem with this scenario is as follows: We do not transmit "Windy Repeater" on the 220 link and we clearly heard this while the path problem was there. So we are going with the 444.40 passivity. Perhaps our transmitter is a bit off frequency at Healy ... we shall see.

With Healy down this puts McKinley repeater off the air. We need to change the 444.40 Rx at the Park. The one that is presently there does not have the sensitivity of the new Receivers. We have a Rx to replace the one at the Park.

When the climb to Healy permits Tim O'Neil is going to contact me and we will see what we can do to get Healy back on the air.

Mount Fairplay is off the air. The State Telecommunications and the Air Force folks had a power supply problem and all equipment that was not essential was turned off. This meant US!!!

The 440 input is not very sensitive and we do not know why. I have another Rx (449.7 MHz) to see if this will help. I believe that the Rx is being de-sensed by something at the site. Hopefully we can get there and do some intensive testing. The Air Force folks have told me they are planning a trip there soon.

With Fairplay off the air Northway and Eldridge are both off the air.

Porcupine Dome is working but we need to change the batteries and put a high current solar regulator at the site.

We do not have money to buy batteries or a regulator ... We have only \$65.00 in the repeater fund. It will take at least \$500 to buy the re-habed batteries and the regulator.

Donnelly Dome is working on wind and solar panel. We need to get there this summer and dig up the underground cable from the Alascom site to get AC power at the site.

Hill 3295 (Eielson 147.120 Machine) is operational but needs to have the 147.720 Mhz receiver replaced. We have the Rx ready to go but are awaiting a call from the Air Force contract folks to take us up there.

Cantwell (Reindeer Mountain) was out, found a bad power supply. Replaced it with our system spare. We now need to replace the spare. The cost of a 40 amp supply is about \$225.00 with shipping.

Ester, Canyon, Manley, Donnelly, Nenana, and Dot Lake are working normally as far as we know

Steve Estes, KL7XO advises that management of the state repeater sites will be taken over by ACS. We should be prepared for access problems

Linda Mullen, AD4BL reports for the Emergency Preparation Committee that Larry Ledlow, N1TX will be scheduling a training meeting on April 23 at a location to be announced. Two training sessions are planned for May. Contact Linda Mullen, 488-7046 or <ad4bl@mosquitonet.com> for further information.

Linda also reports that the Sunday evening Interior Net meeting on the KL7KC repeater is now the official ARES Net.

OLD BUSINESS

Rex Keirn, AL7BJ reports results of the past VE session: Ten applicants were tested. Two passed the No Code Tech. test and one each passed the General and Extra Class tests.

Linda Mullen, AD4BL advises that VE's are needed for the next testing session on Saturday May 4. Contact Linda Mullen, 488-7046 or <ad4bl@mosquitonet.com> if you would like to help.

NEW BUSINESS

Steve Estes, KL7XO and Dianne Marshall, AL7FG advise that the Tour de Cure bicycle tour will take place on Saturday, May 18. Ham radio volunteers are requested for communication help at check points, start line and finish line. For information or to volunteer contact Helen Brown, KL0CM 451-8970 or <hbrown@mosquitonet.com> or Steve Estes, KL7XO 479-5819 or <kl7xo@gci.net>.

Dianne Marshall, AL7FG advises that Boy Scout Merit Badge classes will be held on April 27. Ham help is needed to teach ham radio topics. Contact Dianne 479-5819 or <dianne.marshall@asf.alaska.edu>

Linda Mullen, AD4BL advises that the Eielson AFB CAP Cadet Squadron is requesting a Ham Radio presentation at their meeting on May 15. Contact Linda Mullen, 488-7046 or <ad4bl@mosquitonet.com>.

Linda also advises that we need to plan on nominating club officers for next year.

Mike Drury, KL7GL suggests that a chronology of club events be posted on the kl7kc.com web site. Steve Estes, KL7XO volunteers to do this. (Check the web site; for the chronology. Thanks Steve.)

ANNOUNCEMENTS

Linda Mullen, AD4BL will host a Board of Directors meeting and club picnic at her home at 4:00 PM, Sunday, July 14. This will be a 'Pot Luck' affair. contact Linda 488-7046 or <ad4bl@mosquitonet.com> for further information and directions.

Linda also advises that we still need a co-chair for the Hamfest. Contact Linda 488-7046 or <ad4bl@mosquitonet.com> or Jim Movius 452-6347 or <ajmovius@gci.net>.

Rex Keirn, AL7BJ reports that Terry Preston, WL7TY is still in Fairbanks Memorial Hospital in room 266. Terry is allowed visitors and will be there until about April 18.

The next AARC general meeting will be at 7:30 PM, Friday, May 9, 2002 in the auditorium at the Geophysical Institute. The main topic will be a planning discussion for the Tour de Cure and other topics to be announced.

The next Board of Directors meeting will be hosted by Bob Ball, KL7AH. at 7 PM, Thursday, May 9, on Holden Ave. , second house on the north side. Holden is off east side of University Ave. between Davis Ave. and Sophie's Station.

As usual, the Board meeting is open to all members.

Meeting adjourned.
Submitted by,
Bill Beam, NL7F
Secretary.

Special Event Reports:

Junior Yukon Quest Dog Sled Race

1. Nature of activity: Special exercise
2. Brief description of activity: Junior Yukon Quest Dog Sled Race
3. Places or areas involved: Fairbanks Downtown to Twin Bears camp ground [about 60 miles one way]
4. Number of amateurs participating: 18
5. Event start date/time: Feb. 2, 2002 0900

6. Event end date/time: Feb. 3, 2002 1430

7. Duration of event: 29.5 hrs

8. Total man-hours: 275

9. Number of repeaters used: 2

10. Estimated manpower cost (man-hours times \$10/hr): \$2750

11. Estimated cost of equipment used (hand-helds, repeaters, etc.): \$14,500

12. Total estimated cost of service (add amounts from lines 10 and 11): \$17,250

13. Nets and/or frequencies used (including repeater call signs): 444.40 simplex link from the Start line into the Comm center 146.88 main Repeater 147.12 backup repeater

14. Number of messages handled: continuous

15. Names of agencies receiving communications support: Jr Yukon Quest, Yukon Quest Canada, Yukon Quest Alaska, local media

16. Please list call signs of amateurs who were major participants: KL0RN KL0ZE KE4ITP NL7XH
KL0QS NL7F KL7GL KL1AZ KL7JAT AL7EX AL7XT KL0OZ WL7CRC AL0W WL7UB KL7JM
AL7QY AD4BL

17. Other comments: We also had a group of CAP Cadets from Eielson AFB assisting in comms between the staging point and the Comm Center. We had 10 teams with mushers from 14 to 17 years old. The Comm center operated on a 24 hr basis because of timing changes in the race this year. We had an amateur on a snow machine leading the race to move moose off the trail and another following the last team. Operators at the Comm Center also manned the Race Update phone line.

Name of Amateur Radio organization providing service:

Arctic Amateur Radio Club

Location of organization: Fairbanks Alaska

Your name and callsign: Linda Mullen, AD4BL

Your address and telephone: 4555 Melan Dr N, Fairbanks, Alaska 99712, 907-488-7046

ARRL appointment(s), if any: SEC STM TC ORS OES

Your email address: ad4bl@mosquionet.com

Submitted by Linda Mullen.

ARES INFO:

Greetings, all. Due to various conflicts amongst us in March and a trip I have coming up next week, I've had to reschedule the next ARES meeting for Tuesday, April 23rd. Sincere apologies. Time will be 7 PM, tentatively at the Elvey building at UAF like last time. I will try to secure a more spacious room than the other one.

We'll have two half-day (3-4 hours) Saturday and/or Sunday training sessions in May. Let me know your preferences for specific dates. Memorial Day weekend is already booked for me, as I am sure it is for most of you.

Meantime, I can highly recommend the emergency communications training available through ARRL (<http://www.arrl.org/cce>). Registration for the Level I ARRL Amateur Radio Emergency Communications Course (EC-001) will remain open through the April 6-7 weekend. Registration for the Level II Amateur Radio Emergency Communications Course (EC-002) opens Monday, April 8; registration for the Level III Amateur Radio Emergency Communications Course (EC-003) opens Monday, April 15. All registrations open at 4 PM Eastern Time. ARRL Emergency Communications courses must be completed in order, starting with Level I. To learn more, visit the ARRL Certification and Continuing Education Web page and the C-CE Links found there.

Thanks much and vy 73!
Larry L. Ledlow, Jr. KL7/N1TX
AMSAT Area Coordinator Grid BP64
ARRL Fairbanks EC FISTS 5711
73 from 65 North - Fairbanks, Alaska

Summer/Fall Events Schedule:

Below is a tentative AARC calendar for the remainder of 2002 Please send

additions or corrections to me.

I'll soon post them on the KL7KC web page.

May 3 7:30 p.m. AARC general membership meeting at Geophysical Institute

May 9 7:00 p.m. AARC board meeting @ KL7AH's QTH

May 18 morning Tour de Cure needs hams for six checkpoints, start/finish and on the trail

June 13 7:00 p.m. ARRC board meeting, location TBA

June 22-23 Yukon 800 **?? can anyone confirm this ??**

June 29-30 Motley Group Picnic, Byer's Lake, Mile 147 Parks Highway **?? can anyone confirm ??**

July 13 4:00 p.m. AARC picnic at AD4BL's QTH.

August 8 7:00 p.m. ARRC board meeting, location TBA

September 12 7:00 p.m. ARRC board meeting, location TBA

September 15 AARC Hamfest and annual membership meeting, location TBA

October 4 7:30 p.m. AARC general membership meeting at Geophysical Institute

October 10 7:00 p.m. ARRC board meeting, location TBA

November 1 7:30 p.m. AARC general membership meeting at Geophysical Institute

November 7 7:00 p.m. ARRC board meeting, location TBA

December 6 7:30 p.m. AARC general membership meeting at Geophysical Institute

December 12 7:00 p.m. ARRC board meeting, location TBA

Submitted by Steve KL7XO

Repeater Report:

Please see report in the Board Meeting Notes.

Special Event:

Are you familiar with the YLISSB? It stands for the YL International Single Side Band radio group, founded in 1963. It meets daily at 14.332. This year, the YLISSB will be holding their annual convention in Fairbanks. Hosts for the convention are Stan and Rose Rybachek, KL7FQR and KL7FQQ. The convention will start with a tour to Denali on Monday, June 17, returning June 18th. A tour to the Arctic Circle on Wednesday, June 19th...then on Thursday, June 20th, the group will go to the Santa Claus House, lunch at the Rybachek's, and a tour of Little Eldorado Gold Mine. Friday will begin with a breakfast at the Captain Bartlett at 9, followed by registration from 2-5, the Alaska Salmon Bake, Palace theater, and the midnight sun baseball game. The business meeting will be held on Saturday, June 22, beginning at 9 AM. The banquet will be Saturday evening, with a farewell breakfast on Sunday. If anyone would be interested ! in attending any of these functions, please give Rose a call at 488-6453.

Currently, there are 49 registered for the convention, including a couple from New Zealand, Nova Scotia, one from barbados, and most of the rest of the attendees will be from the various states. It is usual for this group to have a "radio room" during the convention. This year, the Captain Bartlett is letting us have the Chart room for a radio/boutique room, as well as a meeting room. The room will be available from Wednesday, June 19 until after the breakfast on Sunday, June 23rd.

Up until recently, it was thought that someone in the group would bring a radio and antenna, but that has apparently become impossible. So, we were wondering if anyone has any ideas as to what we could use for a radio? KL7VY and KL7RO have an antenna that we can use. But, if someone has a setup that is portable, it might be easier to use that. Anyway, IF someone out there is interested in helping us with this problem, and would be willing to provide a rig, with set up and tear down, we would be happy to offer a couple of banquet tickets in return! Give us a call if you can help! And, if you have any ideas. Or, if you'd be interested in any of the functions! 73's Rose and Stan.

Tec Corner:

By Bob Ball, KL7AH

Recently John, KL1AZ, our new newsletter editor asked me to do an article, so

here goes and I hope you find it of some interest. We all received the e-mail from Larry, N1TX, regarding the new Saudi Oscar 41 satellite that was recently activated for amateur use and I'd like to expand a little further on amateur satellite operations. If you've never worked any of the many amateur satellites then here is a great opportunity to expand your activities while having a lot of fun. There are many amateur satellites in orbit ranging from the very small picosats to the new Oscar 40, however for this time I'll only cover a couple of the easier to work sats and as you get more experience you can work up from here. Probably some of the easiest ones to work are the sats that are just high flying FM repeaters like UO-14, AO-27, or as Larry announced the Saudi Oscar 41. These are all FM repeater sats that can be worked with a dual band (2 meter/70cm) portable and a handheld dual band yagi antenna from your front yard. They are in orbits that are approximately 500 miles high, an orbit time of about 100 minutes, and a maximum usable talk time of about 15 minutes for a pass directly overhead. Obviously these aren't for long rag chew contacts but are a blast to work! You can't ask for much easier radio requirements than these sats require, just a portable that many of you already own and a cross-yagi antenna such as the Arrow (about \$80 in the newest AES catalog). If you're into home brewing as I am then the antenna only costs about \$8 and a little of your time. No matter which way you go this is a pretty easy introduction to satellite operations and a great way to "get your feet wet". The other satellite that is also easy to use is the cw/ssb Russian RS12/13 that, depending on the operating mode, has an uplink on 2 meters, down on 10 meters, or an uplink on 15 meters and down on 2 meters. When the sunspot cycle is on the low side then the 10 meter down, 15 meter up mode is available. The operating mode for the Russian satellites changes frequently so be sure to check the Amsat web site (listed below) for the latest information. Obviously for this sat you need HF privileges. I've been on all of these birds except the new Saudi Oscar 41, still haven't been able to hear that one yet. There are many other ham sats in orbit but these are by far the easiest to setup for and to operate through. If you do want to give it a try then there's some additional information needed to be successful. There is a lot of tutorial information on the internet that will be quite helpful in getting started, so check some of these web sites: www.amsat.org, for satellite information, current status, operating frequencies, and tutorials under some of the specific satellite listings;

www.ac6v.com look under satellites on the main index for numerous very helpful links on tutorials, operating hints, frequencies, etc. To obtain orbital predictions the best program I use is the freeware at www.dransom.com called STS Plus. It can be a little tricky getting setup so if you have any problem then just call for help, but it does have good graphics and works great. If you didn't want to drag your computer everywhere, then you can get tabulated data you can print out at www.heavens-above.com. A nice listing of the ham satellites with operating frequencies can be seen at www.qsl.net/w8dro/. There is another site that has what appears to be a really nice sat tracking program (also freeware, one of hams favorite words!), but I haven't had a chance to download it yet. Anyway the site is www.satscope.co.uk. If you want a graphical view of the earth from nearly any satellite in orbit then check out www.fourmilab.ch/earthview/satellite.html. If any of this seems interesting, give it a try and if you run into problems then feel free to e-mail or call me with your questions. It's a lot of fun, adds another avenue to your ham radio adventures, and something you can do even while on vacation. Hope to see you on the bird.

73, Bob KL7AH e-mail kl7ah@gci.net

Receiver Squelch Systems used by Hams

By Benny NL7XH

Let's look at the three most common methods of squelch control.

The first and most used is *carrier operated squelch* (COS). The circuitry looks at the average level of signal and the squelch level is adjusted by the user to kill the white noise (static)

When a carrier is received the average level of the noise plus usable signal increases above the set point and the "gate" is opened and the audio is un-muted. This works well when there is not a lot of extra signals floating around. When in a noisy environment the gate is opened many times by random noise. These could be as simple as local TV or radio transmitters, computer noise, motors and many other noise pollution devices.

In this new world of "DC to Light" All Band Transceivers the front end of these receivers are not nearly as tolerant of stray noise (QRM) as the non All Band Radios.

A couple of radios that I own, the Icom 706 MKIIG and the Kenwood F6 A, have lots of problems with QRM breaking squelch. As I drive around town and pass a bank or a radio station the radio lets me know it. How do we approach this problem? Let's look at CTCSS discussed next.

One of the easiest methods to help solve this QRM problem is to incorporate *constant tone coded squelch system* (CTCSS). This is what we use on our entire repeater systems. The CTCSS uses 47 tones from 67.0 Hz to 254.1 Hz. We use 103.5 Hz on our repeater network. These tones are often referred to as PL this is an abbreviation for *Private Line*. Sometimes we use the term *sub audible tone*. Our radios have a normal 300 Hz to 3000 Hz for audio. The PL tones are below the 300 Hz frequency hence the name sub audible tone.

When this mode is used the radio has decoding logic that has very narrow band filters that looks for the exact tone. In most radios the tone cannot be more than plus or minus ? Hz from the selected tone. When the circuitry detects the tone the squelch gate opens the receiver and allows audio to be heard.

To you folks out there that have the new broad band front end radios and are getting squelch breaks around noise generating equipment you can now select CTCSS function on your receiver when using the 146.88 repeater. Since more and more Hams have the "DC to light" radios we now transmit 103.5 Hz on the 146.88 machine. The radio will no longer give you those annoying blasts of white noise and will only turn on the audio when the receiver hears the 103.5 Hz from the 146.88 signal.

The third most commonly used squelch used is DTSS *Dual tone squelch system*. This system is often called paging system. It uses the same DTMF *Dual tone modulated frequency* tones as the auto patch system. I shall cover the makeup of DTMF tones at another time. When this mode is selected the radio typically sends a short burst of three tones. All receivers that are tuned to the transmit frequency will attempt to decode the DTSS signal, only the proper sequence of tones will open the squelch gate and allow audio to be heard. This is a very neat system as many units can operate on a frequency without hearing conversations that are not meant for you. A good example of this use is police units. There can be hundreds of receivers listening but only when your code sequence is sent will your radio "wake up". This system is unique in that it can set up groups as well as individuals. Perhaps you want several police units to respond to a call so a group

DTSS signal is sent. If everyone needs to be alerted yet another different DTSS signal can be sent. As long as the radios are programmed to understand the codes many different groups can be set up.

The DTSS function is not generally available on older radios and is often an option on new radios.

We do not use DTSS as a squelch mode on our repeaters. This does not prevent anyone out there that would like to use DTSS for squelch control between their units. My wife WL7CIZ and I use it a lot. She does not like to hear "the mail" when she is driving around town and shuts the radio off to keep the chatter out of her life. This is not helpful to me when I wish to call her so we use DTSS to communicate between her rig and mine. I setup her receiver to a DTSS code and nothing will break the squelch gate until I transmit her code. At this time the radio opens up and she can now hear my frantic call for her to talk to me. My radio transmits the DTSS code each time I key up the transmitter.

You cannot use DTSS on our repeater system. The 146.88 machine is set up to blank DTMF tones. We do this to prevent the annoying sound of the touch tones as they are sent to the auto patch, and for security reasons.

If you wish to try DTSS, the 146.94, 147.09 and the 146.79 machines all pass the DTMF tones.

There are many other squelch control systems but this covers the three most commonly used by HAMS.

Radio Humor:

The Tower

Dear Ms. Jones

Patsy Insurance Co.

Wata'ohoh, HI 96999-0101

I am writing in response to your request for additional information for Block 3 of

the Accident Report Form (ARF) I submitted to you on April 1, 1997. I put "poor planning" as the cause for the accident. You said in your letter that I should explain more fully. I trust the following detail will be sufficient.

I am an Amateur Radio operator and on the day of the accident, I was working alone on the top section of my new 80 foot tower. When I had completed my work, I discovered that I had, over the course of several trips up the tower, brought up about 300 pounds of tools and spare hardware. Rather than carry the now unneeded tools and material down by hand, I decided to lower the items down in a small barrel by using a pulley, which was fortunately attached to the gin pole at the top of the tower.

Securing the rope at ground level, I went back to the top of the tower and loaded the tools and material into the barrel. Then I went back to the ground and untied the rope, holding it tightly to ensure a slow decent of the 300 pounds of tools. You will note in Block 11 of the Accident Report Form that I weigh only 155 pounds. Due to my surprise of being jerked off the ground so suddenly, I lost my presence of mind and forgot to let go of the rope.

Needless to say, I proceeded at a rather rapid rate of speed up the side of the tower. In the vicinity of the 40 foot level, I met the barrel coming down. This explains my fractured skull and broken collarbone. Slowed only slightly, I continued my rapid ascent, not stopping until the fingers of my right hand were two knuckles deep into the pulley. Fortunately, by this time I had regained my presence of mind and in spite of my pain, I was able to hold on to the rope. At approximately the same time, however, the barrel of tools hit the ground and the bottom fell out of the barrel. Devoid of the weight of the tools, the barrel now weighed approximately 20 pounds. I refer you again to my weight, shown in Block 11 of my submission.

As you might imagine, I began a rapid descent down the side of the tower. In the vicinity of the 40 foot level, I met the barrel coming up. This accounts for the two fractured ankles, and the lacerations of my legs and lower body.

The encounter with the barrel slowed me enough to lessen my injuries when I fell onto the pile of tools and, fortunately, only 3 vertebrae were cracked. I am sorry to report, however, that as I lay there on the tools, in pain, unable to stand and watching the empty barrel 80 feet above me, I again lost my presence of mind and let go of the rope

Sincerely,

Andy Clark, WA4PRF

TIARA (Tokyo International Radio Association) *Last modified 07/14/1999*
01:04:42

By Joe Speroni

For Sale/Trade:

I received a call from a Mike Crelli ... he has a Kenwood TS430S he bought many years ago from Al Weber. He now wants to sell it. He never became a ham and wants to forward this rig to someone that can use it. He tells me that it is in perfect condition. (for you to determine). I looked on the "bone yard site" and the 430S rigs are selling for \$400 to \$600 Mike is asking \$450 or best offer. His telephone number is 455-4047

73"s Benny NL7XH

I have an unbuilt Downeast Microwave 50-28CK six meter transverter kit for sale. Includes 10m IF output, 20W output, cast aluminum enclosure, heat sink, etc. For technical details and a review, see <http://www.downeastmicrowave.com/50.htm>. This is a high quality, top performing kit requiring moderate expertise in electronics assembly.

DEM 50-28 Operating Specifications:

Operating Voltage 12.0 - 15.5 VDC, 13.8 nominal Current Drain - 50-28, 50-28CK 4 amps maximum on Transmit, 350 ma. on Receive 50-28K 500 ma. on Transmit, 350 ma. on Receive Output Power 50-28, 50-28CK 22 W maximum, 19 W linear. (10w with 0 dBm IF drive) 50-28K 400 mW maximum, 200 mW linear (100 mW @ 0 dBm drive) Maximum IF Drive Power 200 mW (+23 dBm) with 25 dB IF adjustment range Receive Noise Figure 1.0 dB maximum, 0.8 dB nominal Conversion Gain +17 dB nominal (25 dB adjustable IF attenuator)

Retail price is \$295. Asking \$210, sold as-is (unassembled).

Contact me at 474-6973 (days 0900-1800) and 488-8399 (eves 1900-2200).

73 Larry N1TX

NEWSLETTER EDITOR COMMENTS:

Thanks to all who are providing input for the newsletter. All input and comments/articles are welcome. This is the 2d edition that I have put together and the 1st to be mailed out to those who do not have an e-mail address. If you have an e-mail address this is one way to save the club money, with the current rise in postal rates it is going to become more expensive to mail out the newsletter. I would like to that this time to remind all that the one's who make the club are the members, and we are the only one's who can help it to grow. We are currently faced with a shortage in the repeater fund and some of the repeaters are off-line and will not be able to be repaired without funds. If we wish to continue enjoying our current repeater service we need to look at how we are going to repair those in need.

As a reminder if you wish to have something put into the newsletter you may e-mail me at slaternorthp@mosquitonet.com and be sure to include your call sign in the subject so I will know it is from another ham, or it will be deleted, or you may call me at home 488-5209.