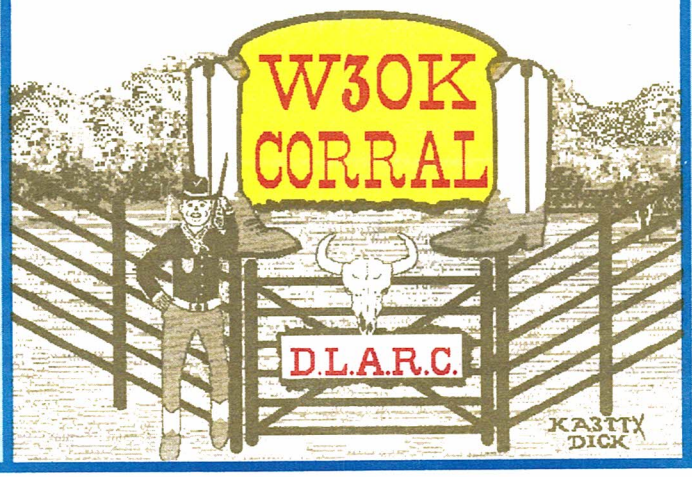
DELAWARE - LEHIGH AMATEUR RADIO CLUB, INC. W3OK

July 1994



SPECIAL SERVICE CLUB
ARRL

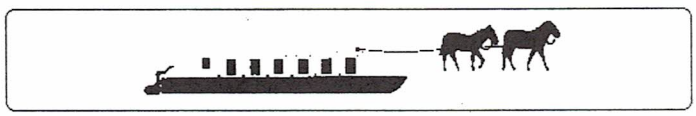
ARRL Affiliated Club

CANAL FESTIVAL SPECIAL EVENT JULY 9th

Canal Festival Special Event

de Rich Shevalier N3NXF

The Delaware-Lehigh Amateur Radio Club will be running W3OK special event station at the Easton Canal Festival.



Our station will be on the deck of the moored Josiah White I, near the Lockhouse. Anyone who would like to help operate the station is invited to come by. Set up will be starting between 6:30 - 7:00 a.m. on Saturday July 9, 1994. W3OK will operate on 80 - 10 m SSB only, between 8:00 a.m. and 8:00 p.m. Please stop by and join in on the fun. The following appears in this year's Canal Festival Booklet:

The Delaware-Lehigh Amateur Radio Club (DLARC) will be running W3OK, a Special Event / Demonstration amateur radio station from the Canal Festival site this year. Visitors will be able to watch the operators make voice contacts with other Amateur Radio operators from other states, and around the world. All stations that are worked from W3OK, and request it, will receive a special commemorative QSL that confirms the contact was made during the Canal Festival. **de Rich, N3NXF**

July 7 in Kiva Hall Northampton County College Meeting starts at 7:30 PM

Hear all about INTERNET from Joel K9TBD, more information inside. Talk in on 146.70 if needed.

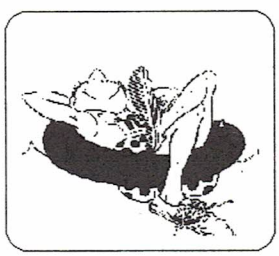
Derriere in the Delaware and Lehigh River Run July 24th

by Clarence, W3PYF

Summer Splash is back and with it is our job as members of the DLARC is to supply all the safety communications that are needed for that day.



Beginning with the 22 mile relay race, five members to a team, the Lehigh River Run begins at Canal Park in Allentown and ends at River Side Park, Easton. The Derriere in the Delaware, with it's 1 mile tube float begins at Eddyside Park and ends at Scott Park in Easton. We will continue to do what we have been doing for the past 8 years keep the floaters and the runners safe.



Dick Dech, KA3MOU will head the communications from the County Van together with Dave, N3DQE on the DID and Amy, KD3TI will head the contacts on the River Run.

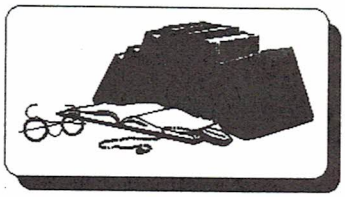
If you have worked this event before be sure to contact either Dick or me, W3PYF and indicate that you will do it again. We will need all the help we can get for this major fund raiser for the Lehigh Valley Red Cross. If you have not been part of this event, contact us and help.

de Clarence W3PYF

Just the minutes

by Bob, N3OLH, Secretary

The June meeting of the Delaware-Lehigh Amateur Radio Club was called to order at 7:35 PM on June 2, 1994 in Kiva Hall at the Northampton Area Community College by the Club's President, Bob Green, KE3AW. There were 72 members and guests in attendance.



Robin, WA3T, moved that the minutes of the May Club Meeting, as published in the June 1994 issue of the W3OK Corral, be approved. Phil, N3KWN, seconded the motion and it was approved by a vote of the membership.

Dick, KA3MOU, presented the Treasurer's report which showed a balance in the Club treasury of $3,858.69. Bruce, KA3TIU, moved that the Treasurer's Report be accepted as read. The motion was seconded by Jim, N3QZS, and approved by the membership.

Kenneth N. Derstine, WA3MQY; Anthony E. Dino, KE3ME; Charles J. Dino, KA2KZN; David J. Ostile, Jr., No Call; David J. Ostile, Sr., No Call; Christopher M. Post, Call Pending; Michael J. Rehal, KE3MU; and Bob Winburn, KB3BAS, submitted applications for Club membership.

A motion to admit these applicants into membership was made by Clarence, W3PYF, and seconded by Blair, K3YD. The motion was approved, however, there was one vote against admitting into membership those applicants who were not present at the meeting. The new members were welcomed into the Club and those quests in attendance were recognized.

George, N3OWG, reported that one member had submitted an application for the DLARC 50 award. To help other members get the required 50 contacts for the award, George suggested that members who frequently use the HF bands let him know what frequencies they like to use and he will publish them in a future issue of the Newsletter.

Bill, KA3RBH, reported that the Club's demonstration station at the recent Boy Scout Jambo was a big success (see article elsewhere in this issue of the Newsletter). However, he wanted to thank all of the Club members who assisted in the event. He presented Club Certificates of Appreciation to Melissa Ruggiero and Josephine Turzanski who, although they are not Club members, provided valuable assistance.

Bob, KE3AW, presented Clarence with ARRL certificates naming his station, W3PYF as an official ARRL Emergency Radio Station and designating Clarence as a Section Emergency Coordinator.

Clarence informed the membership that Club members are needed to provide emergency communications in two Club endorsed events. The Red Cross Derriere In The Delaware (D.I.D.) and associated run to be held on July 24 and the Easton Hospital Walk on August 5. Members who can assist in the D.I.D. should contact Clarence or Dick, KA3MOU. If you can help with the run please contact Amy, KD3TI. Anyone who can help with the Easton Hospital Walk should contact John, N3IGA.

Rich, N3NXF, said that he and Brad, KA1RAH, are still looking for operators, especially those with higher class licenses, for the Special Events Station to be held on July 9 from 8:00 AM to 8:00 PM in conjunction with Hugh Moore Canal Celebration. Please contact Rich or Brad if you can spend some time at the station.

Tom, N3LLL, announced that his is putting together a technical group, reporting to the Vice-President, which will be responsible for the Club's repeaters. The group will consist of about 8 to 10 members, with all levels of technical ability, who will serve on a rotating basis. The group will not only provide the expertise necessary to oversee the Club's stations but will be a training ground for those with little or no technical skills. Tom will report on the progress of the group at the July meeting. If you are interested in serving on this group, please contact Tom.

Joel, K9TBD, will welcome suggestions for topics to be covered in his Digital Column in the newsletter.

Flyers for the DLARC 1994 Hamfest are available for distribution from Bill, K3ANS. The committee needs a CleanUp Committee Chairman, a Ticket Chairman and someone to manage the ARRL table. Please contact Bill if you can help in any of these jobs.

Bob, WF3H, described the MS 150 Tour and asked for more members to assist in this club endorsed event (see article elsewhere in the Newsletter).

As part of our efforts to have members share items of interest to other hams, Bill, K3ANS showed a mint condition Western Electric 1941 radio transmitter and power supply which is for sale. Bob, KE3AW also showed a first copy of a new map which is just being released by the ARRL. Of special interest was that Bob's son was the Map's cartographer.

Bob announced that the evening speaker would be Bob, KU3K, who would tell everything you wanted to know about the up coming Field Day.

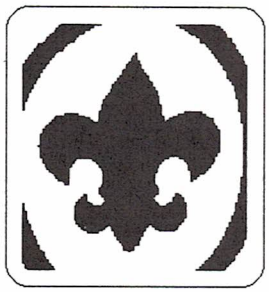
A motion to adjourn was made by George, N3OWG, and seconded by Chuck, N3RCK. The meeting was adjourned at 8:35 PM.

de Bob N3OLH, Secretary

JAMBO "94"

Boy Scout exhibition and show

by Bill, KA3RBH



It has been three years since the last Boy Scout JAMBO, and again this time, May 21, we had a solid success with W3OK operating at the Rausch Field House near Stabler Arena in Bethlehem. In addition to HF and VHF voice modes, this year we added packet operation to the display. We set up two VHF antennas and a BIG all band dipole.

We also tried a new experiment - VHF without coax - but it didn't work. When the 20 foot pole with antenna was in place and properly guyed, we discovered no one had connected the coax. It caused a short delay, but a lot of laughs, too.

We made contacts on all modes of our set up, and the station attracted cub scouts, boy scouts, non-scouts, parents, and other adults. Of the countless visitors to the display, over 35 interested persons completed requests for information on amateur radio license classes.

All who were there put forth a committed effort and promoted this event. That made it a complete success. A tip of the hat to Merle, W3LPB, and wife, Josephine; Tom, N3LLL; Don, W3LR; Bob, KA3WJF; Dave, WD5BRP; Bob, N3QZR, and his fiancee, Missy; Dick, Bud, WA3BOM; Jeff, N3RVH; Greg, KB2ANG; KA3MOU; Paul, N0KIA; Bob, KE3AW; Joe, N3RJS.

The two "YLs," Merle, W3LPB's XYL, Josephine, and Bob, N3QZR's fiancee, Missy Ruggiero, deserve special recognition. Josephine helped as liaison with the Boy Scout Jambo organizers. She also treated the antenna assembly crew to a delicious dinner. Missy put more than novice effort into our antenna farm, carrying, holding, pulling, tying antenna guys... doing what was needed to assemble all the antenna parts before Friday's nighttime

Thanks to all who made this event so successful, and had a fun time in the process.

de Bill, KA3RBH

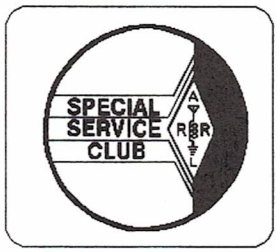
The Prez Sez

de Bob, KE3AW



DLARC recently received an endorsement seal for our ARRL Special Services Club certificate. We are an ARRL Special Services Club. What does that mean? How did we do that?

The Special Services Club award is made by ARRL to clubs that meet certain criteria. The clubs are seen as "well balanced in their programs for serving the community, developing club members's Amateur Radio skills and social activities, and striving each year to build on their successes to improve their effectiveness." As a Special Services Club DLARC has demonstrated that "members have certain skills, and that the club as a group has the ability to provide service inside and outside the Amateur radio community, and that it does so when needed."



This means we have activities that are being recognized -- programs at our monthly meetings, our W3OK Corral newsletter complete with regular columns and guest authors, amateur radio awareness programs, license classes, VE testing, our Christmas City and Hugh Moore Park Canal Museum Special Events, and demonstration stations. It means the PAQSO Parties, and our contest awards program including the newest, DLARC 50 award. It means our hamfest, our repeater systems, our nets, evacuation practice drills, field day drills, and our picnics. And it means our communications assistance in bikeathons, walkathons, parades, and the "Derriere" tube floats, to give some examples.

DLARC and DLARC members continue to show a strong sense of friendship (at all events, not just the Meeting Bs), sharing of information and new ideas (in and outside the formal meetings), a sense of compassion (communications in time of need and our club's donations to earthquake victims), and a sense of humor (such as WA3T's April, 1994 QST article on DSP).

When you take a moment to inventory our club's functions it becomes evident that we are a very multifaceted club. Each month brings with it an opportunity to actively participate in one, or many, events. Summer has arrived and the activities are there for all to share.

DLARC has earned the right to be called a Special Services Club. Be a proud part of it!

de Bob, KE3AW, President DLARC

"Roanoke Phantom Sentenced"

From The W5YI Report Volume 16, Number 10

An unlicensed Roanoke, VA radio operator who identified himself as the "Roanoke Phantom" was sentenced April 24 to 100 months in prison and fined $2,000 ... to be followed by three years of supervised probation.

Rodney E. Bocock had been convicted of transmitting false air traffic control instructions, endangering the safety of aircraft in flight and using obscene, indecent or profane language on aviation frequencies. His transmissions included mis-information to pilots, false distress calls and offensive language.

A massive joint effort was mounted by the FCC, FAA, FBI and the Allegheny County Sheriff's Dept. to locate Bocock and was one of the most difficult cases the Commission has had to solve. FCC investigators from across the country were called in to assist in surveillance, radio direction-finding and technical signal analysis work. The case involved more resources than any other case in FCC history.

"This joint effort resulted in resolution of a serious threat to aviation safety," FCC Field Operations Bureau Chief Richard M. Smith said. "The conviction and now the sentencing should send a strong message that people who commit this sort of serious violation will be caught and punished."

73 Chris KD3OA ARRL EPA Bulletin Manager

Atlantic Division ARRL Hamfest Calendar

+ Denotes ARRL Hamfest

+JUL 3 Murgas ARC - Wilkes-Barre, PA

JUL 4 Harrisburg RAC - Bressler, PA

+JUL 10 Genesee RA - Alexander, NY

+JUL 10 North Hills ARC - Pittsburgh, PA

+JUL 10 BRATS - Timonium, MD

JUL 16 Red Rose Repeater Assn - Lancaster, PA

+JUL 23 Jonestown Mtn. Repeater Assn - Huntingdon Mills, PA

+JUL 23 Utica ARC - Utica, NY

+AUG 7 Mid-Atlantic ARC - Warrington, PA

+AUG 7 Southern Patuxent ARC -Upper Marlboro, MD

+AUG 7 Skyview ARC - New Kensington, PA

AUG 13 Fingerlakes - Ithaca, NY

+AUG 14 Delaware-Lehigh ARC - Easton, PA

AUG 14 Summit ARA - Westminster, MD

+AUG 21 Delmarva - Georgetown, DE

AUG 27 PROS - Chaffee, NY

+AUG 28 Gloucester Co. ARC - Mullica Hill, NJ

+AUG 28 Tri-State ARC - Matamoras, PA

+SEP 10 Radio Assn of Erie - Erie, PA

+SEP 11 Butler Co. ARA - Butler, PA

+SEP 11 Founation for AR - Gaithersburg, MD

+SEP 17 Buffalo Hamfest - Buffalo, NY

+SEP 17 Columbia-Montour ARC - Berwick, PA

+SEP 18 South Jersey Radio Assn - Pennsauken, NJ
SEP 24 Elmira, NY

+SEP 24-25 York, PA

OCT 2 Pack Rats - Warrington, PA

OCT 15 Radio Amateurs of Greater Syracuse NY

OCT 16 Cumberland Co. ARS - Carlisle, PA

OCT 22 Ft. Venango Mike & Key - Franklin, PA

+OCT 23 RF Hill ARC - Sellersville, PA

OCT 30 Mason-Dixon - Westminster, MD

NOV 12 Binghamton ARA - Binghamton, NY

DLARC member elected president of PARK

Debbie Porter, KE3FY has been elected president of PARK, the **Pocono Amateur Radio Klub.** Debbie, is the XYL of Jeff, AI7D. Vice President is Randy, N3NDY.

Jeff has been ordered by the president of that club to become the Editor of their Newsletter the **PocoNoise.**

I wonder if Hillary will order her husband to edit the White House Noise?

Debbie, Jeff and Randy are members of DLARC.

de Clarence W3PYF

For Sale

Cushcraft Model CS147 2 meter 5/8 mobile whip. Coil and whip only no mount. Call Jim, N3EYJ @ 610 559-8123... Asking $20.00.



Hilites from the "The ARRL Letter"

* FCC Turns Down Petitions For Changing Amateur Rules. In late April, the FCC denied three petitions from amateurs to change the licensing structure. One petitioner would have lowered Morse code requirements and two others would have eliminated the 5 wpm CW examination for the Novice license. The FCC said that the current amateur license requirements were the result of Commission proceedings that produced thousands of comments. "The amateur community indicated on each occasion that it strongly desires to preserve communications by telegraphy," the FCC said.

* New Jersey Ham pays fine for QRM to Repeater. A New Jersey amateur has paid a fine for interfering with a New York City repeater. John Lickun, N2MVZ, of little Falls, New Jersey, admitted causing malicious interference to repeater W2SNM, operated by the Manhattan Avenue of the Americas Radio Club. In July 1993, the FCC's New York Field Office monitored transmissions determined to be coming from a coffee vending street stand, and from Lickun. The FCC issued a Notice of Apparent Liability for $1,000; Lickun apologized for his actions a reduced fine of $250.

* Illinois Legislature Ponders A.R. Bills. Three bills related to Amateur Radio are currently before the Illinois legislature, but insiders say only one has much chance of becoming law this session. HB4180 would ban scanner radios as well as many amateur rigs from vehicles, and was the brainchild of a local police force. Legislators are aware of the implications for licensed amateurs and a future bill would exempt them from any such ban. But HB 4180 is dead for this session at any rate, sources said. HB3730 cites PRB-1 and would exempt amateurs from most overly restrictive local covenants on towers and antennas. The bill's sponsor is a Republican from the northwest Chicago suburbs. The bill - as do most current Republican bills in Illinois - languishes. One bill that probably will pass is SB 1159, which would permit Amateur Radio call sign vehicle marker plates on corporate-registered autos (instead of only those registered to licensed amateurs).

* QST to make July Debut On Nation's Newsstands. Beginning in July, QST will be available at selected "newsstands" around the US, on an experimental basis. These newsstand copies will be identical to member copies, except that their front covers will have a slightly different look, including "teasers" for stories inside. QST will still be available at Amateur Radio retail stores.

* Youngest DXCC? Nine-year-old Casey Haley, AB54RG, received his certificate in April. Casey, an Extra Class licensee, lives in south Houston, Texas.

* The FCC has once again denied a request by Dale Gagnon, KW1I, for a waiver of transmitter power limits. A year ago the Commission denied a similar request from Gagnon for higher-power AM operation. The FCC also recently denied a petition for reconsideration from David Ingram of Mableton, Georgia, who was fined $2500 for violating citizens band rules, and fined K40 Electronics, Ltd., of Warren Michigan $20,000 for selling non-type accepted CB equipment, including power amplifiers.

The 31st annual Das Awkscht Fescht (PA Dutch for August Festival and Antique Car show) will again take place on **August 5,6, and 7.**

Local hams will operate W3TEB as a special event station on the General 80,40, and 20 meter phone subbands and 146.55. For certificate, send QSL and SASE to:

Harry Buchin, W3TEB, 21 E. Main St. Macungie, PA 18062-1308.

Changes to Novice Roundup

From The ARRL Letter Volume 13

IDEAS SOUGHT FOR NOVICE ROUNDUP

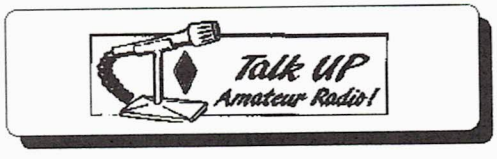
A call has gone out for suggestions for a possible revamping of the ARRL Novice Roundup. The ARRL Contest Advisory Committee welcomes comments on how this event, which has fallen on hard times in recent years, can be resuscitated.

CAC Chairman Mark Beckwith, WA6OTU, observes that the goals of the new contest aren't changed, ie, to introduce newcomers to on-the-air competition and to see if the "contest bug" bites, and to improving operating skills.

The event should include nocode Technicians in some way, too, and there's the rub, since they have no privileges below 30 MHz, and Novices have very limited spectrum above 30 MHz.

"I am a proponent," Beckwith says, "of two different types of events run at the same time, one for Novices and one for code-free Techs, with separate entries and separate reports in the same issue of QST. I guess an enterprising 'Tech-plus' could go out and win both categories if he were really sharp." The CAC is collecting comments on the Internet contest reflector; and you can submit written input to the committee via ARRL HQ.

73 Chris KD3OA ARRL EPA Bulletin Manager



The ARRL Wants You -

Part 3

***** OFFICIAL EMERGENCY STATION *****

If heavy involvement in public service activities appeals to you, consider becoming an Official Emergency Station. It's your job to be well trained in emergency communications procedures. You must be on the alert and ready to jump into action whenever you are needed. You'll provide critical communications during natural and man-made disasters as well as other emergency situations. Official Emergency Stations must participate in the Amateur Radio Emergency Service (ARES). As an ARES member, you become an integral part of a well-trained cadre of emergency communicators. You'll be expected to participate in emergency drills, tests and nets.

Official Emergency Stations are usually appointed by the Section Manager or Section Emergency Coordinator at the recommendation of an Emergency Coordinator or District Emergency Coordinator. (Your Section Manager can put you in touch with these officials.) The requirements are:

* Full ARRL Membership

* A Novice class license or higher

* Regular participation in ARES

* The ability to operate using emergency power. Mobile capabilities on at least one band is also required.

* Full knowledge of the standard ARRL message form * Regular reporting of your activities to the appropriate ARRL official.

To learn more about becoming an Official Emergency Station, send a self-addressed, stamped envelope to the Field Services Department (FSD) at:

ARRL: Attn: FSD
225 Main Street
Newington, CT 06111

Ask for FSD-108 along with an "Application for Station Appointment." To become an Official Emergency Station, you must complete this form and send it to your Emergency Coordinator. As with other station appointments, you'll receive a special certificate from the official making the appointment.

The Field Services Department offers a valuable book that's yours for the asking. It's the Public Service Communications Manual. The manual covers all aspects of public service operating including emergency preparedness, traffic handling and so on. To receive your free copy (only 1 per person, please), send your request along with a larger (7 x 10-inch) self-addressed, stamped envelope with four units of first-class postage to:

ARRL : FSD 225 Main Street Newington,CT 06111

This is the last of three articles in the series entitled **"The ARRL Wants You.** This information is taken from "Handi-Ham World" magazine (A publication of the Courage HANDI-HAM System - Winter, 1994).

supplied by Mark, WA3KIF

FCC turns down requests for changes in rules

from the ARRL News Letter

In late April the FCC denied three petitions from amateurs to change the licensing structure. One petitioner would have lowered Morse code requirements and two others would have eliminated the 5 wpm CW examination for the Novice license. The FCC said that the current amateur license requirements were the result of Commission proceedings that produced thousands of comments. "The amateur community indicated on each occasion that it strongly desires to preserve communications by telegraphy," the FCC said.

The preceding from The ARRL Letter.

73 Chris KD3OA ARRL EPA Bulletin Manager

Contest Calendar

by Barry, KU3X, Contest Editor

July 9-10 IARU HF World Championship
ARCI QRP Summer Home-brew Sprint CW
CQ WW VHF WPX Contest
July 15 W1AW Qualifying Run (35-10WPM)
July 16-17 AGCW-DL QRP Summer Contest
Colombian Independence Contest
July 23-24 SEANET Contest CW
Venezuelan Independence Day Contest CW
July 30-31 W1AW Qualifying Run (10-35 WPM)
Connecticut QSO Party
RSGB IOTA Contest

CONTEST TIP # 26

** The Hot Setup **

Picture this: You're working your friend in Louisville, KY on 40 meters and you see on your computer screen that BY1QH (China) is called out on 15 meters. You hit a hot key on your keyboard and the following happens automatically: Your radio goes to 21235.2 kHz, your amp changes to 15 meters (tuned and ready), your antenna is changed from you 40 meter dipole to your 15 meter beam, and your rotor turns to the proper heading. All that's left to do now is call him. Now that you have worked him, all that you have to do is hit one key and all the proper information is entered in you log. Hit one more hot key and you're back talking to your friend in Kentucky on 40 meters. There are a lot of stations out there that can do just that. Here is what some of them are using.

The logging program is, "DX Log with DX Cluster." The radio is an Icom IC 781 with its matching automatic antenna switch. The amp is the Icom IC 4KL. A special rotor control box that excepts an RS 232 cable. Ouch, that will take a big chunk out of your wallet! The above setup will make working contests and DX a lot easier and faster but this is not in everybody's budget. Surely not mine!

Here are some practical systems that will fit most of out budgets:

Kenwood TS 440s or TS 850s with an all band trap vertical or trap dipole. Yaesu FT 990 and the FT 7000 solid state amp with its matching 4 position remote antenna switch.

Alpha and Japan Radio Co., LTD have amps that sense RF from your radio for fast band changing. Icom and Ten Tec both have solid state amps that are controlled by their radios. Some of these amps have built in antenna tuners.

More and more radio control computer programs are popping up. K1EA and K8CC are both contest programs that control a lot of different radios. DX Cluster with DX Log are logging programs that control a few different various radios. TSMOUSE and Kenwood's ham Windows control the Kenwood line. LOGIC tm3 and Ham View Products work with various radios.

DX Solutions has a computer controlled remote antenna switch.

de Barry KU3X

Russian mail thieves

from the Amateur Radio Newsline



If you have been waiting a long time for a QSL from Russia and have not received it, this might be the reason. According to Ed Kritsky, NT2X, a recent article in a Russian newspaper has announced arrest of several alleged mail thieves at Moscow's Central Post Office.

Four suspects would pick up mail at Sheremetyevo International airport near Moscow then drive their trucks to a nearby woods. There they reportedly opened the bags and rip envelopes open, seeking valuable enclosures such as foreign currencies and IRCs.

The piles of torn envelopes were then dumped on the spot, as trash. The four were caught only when they became careless and started opening mail at the Post Office warehouse.

The newspaper report says that Russian Postal Service security people was helpless to combat the thievery. In fact, they pretty much missed the whole thing. So you might want to mail out another QSL in case its been over a year since you sent out the first.

courtesy Amateur Radio Newsline

Adventures in AM

(Ancient Modulation)

by George, N3OWG



Last September a momentous occasion took place in my life. I came home from the Cherryville Hamfest with a brand new CSCEE in my hand and a hard earned /AG after my call. Now my Elmer had taken away my microphone during my internship as a Tech+ and I just couldn't wait to "talk" to someone. Well I got home and plopped myself down in front of my aging Drake Twin and scanned the new territory on 80 meters. Well gang I am here to report that 80 is not the hottest band at three in the afternoon! But then I heard it, sort of, CQ CQ CQ 75 CQ CQ 75 meters AM.

Now I had seen the AM position on the mode switch of the Drake but had always thought that AM was dead, gone and possibly illegal to use. Boy was I wrong! I quickly found that AM or more properly pronounced "YAY EMM" was very much alive and going strong! And I fell in love almost instantly! This was a different kind of Ham Radio than I had heard from my monitoring of SSB. These folks were actually TALKING! And taking there time in doing it.

Yay Emm is a totally different head from SSB and in a lot of ways is like CW only with full envelope audio. On AM the tube rig is still king. My most recent acquisition a wheezing old Johnson Viking Valiant and it's receiver a Hammurlund HQ 110A is much more prized than any kind of Ricebox (Kenwood, Yaesu, Icom you name it). Now since push to talk was a pretty modern invention as was automatic switching between transmit and receive long transmissions are the norm. Never once will you here "you're 5-9 QRZed?). In fact the whole notion of the RST report is out. You either have a "strapping signal" or you're "p**s weak" there just ain't no in between.

So what are we looking for in Yay Emm? Well first off audio. Really good clear audio. And conversation, long drawn out discussions ranging from politics to 807 tubes. And everyone is always invited to join in. Funny thing in between each transmission people actually pause a bit and wait for new people to jump into the fray. (Like they're supposed to do on 2 meters and don't) I have yet to hear anyone be chased off a frequency using AM which unfortunately is not the norm on 80 meters. Also this is no big DX arena. And since there are a lot fewer Yay Emmers than there are Slop Bucket Slingers (SSB operators) there is a friendly camaraderie that if you're on more that once or twice you in!

OK so your appetite is whetted? Where to go next? Well there are AM windows on all the bands. Here on the East cost 160 meters is used a lot check into the Gray Hair Net on 1.945 mc on Tuesdays at 9:00 pm in the summer and 8:00 in the winter. Also the section between 3.870 and 3.900 mc (yes Mc not MHz that new fangeled stuff'll never stick anyhow!) pretty much all day and all night long. And even if you don't have a really good rig like a DX-100 or a Viking jump in and say "Hi" we'll talk to anybody. Just bring your own rags and be prepared to stay a while. Cause when you hear that big KERTHUNK of a Johnson's manual mike switch get thrown it might take awhile before it's your turn.

See ya on the air November Three Obsolete Wireless Gear, Yay Emm, Radio as it should be.

de George, N3OCW

JUNE VE VE Report

Friday, June 3, 1994

At Gracedale on Friday, June 3 there were 6 candidates who took a total of 13 elements.

There was one new Tech and one new novice license earned.

Alisson L Flyte, Bath novice.
Ned Borger, Northampton technician.

The VE's at this session were: Robin C Moseley, WA3T; Chris Hornaman, NU3L; Bob Green, KE3AW;Bill Werner, W3FYK and team liason, John Greenage, WX3C.

The next session at Gracedale will be held on Friday, July 8 at 7:00 p.m. Team 3 will be in attendance.

de John, WX3C

Ima Lidd

Receivers

By Van K3CP

Part 3 of 5



"Ima, how would you like to learn how a superheterodyne receiver works?" asked Elmer.
Ima Lidd and Elmer had been talking about simple circuits and how they could be combined to receive radio signals. Elmer had emphasized that the combination of coils, capacitors, resistors, and solid state devices could do just about any electronic function. Elmer had said over and over that an understanding of those few components could go a long way to the understanding of most circuits. Ima had some reservations about this, however.

"I know it sounds hard to believe, Ima," said Elmer, "but with the exception of tubes, you have learned about all the parts that go into a superheterodyne receiver. We agreed not to talk about tubes as they have limited application in radio receivers today."

"Yes," replied Ima Lidd, "we talked about those things and I have a fair understanding of how they work. I don't know if I am ready to learn about a superheterodyne receiver, though."

"When we are done with the next few sessions," said Elmer, "you will know how a superheterodyne receiver works. Not only how it works, but also how to trouble shoot it as well."

Ima was not convinced that he could learn how to do this. "Well", he said, "I am willing to try if you have the patience, Elmer."

"Good, let's get started. It's not as difficult as you think. You already know how the signal is picked up by the antenna and the desired frequency selected by the tuned circuit. The signal is then fed into the first detector or mixer."

Elmer was ready for Ima to stop him here. He was not wrong.

"Hold it, please, we never discussed a mixer before," cracked Ima. "I'll bet you're going to say that it is made up of components we talked about."

"Right you are, Ima," replied Elmer. "The first detector stage is the main difference between a superheterodyne and a T.R.F. receiver. It is composed of two circuits - a mixer and a local oscillator - and it takes the received frequency in the input end and outputs the intermediate frequency (IF)."

"Wow, that sounds complicated," said Ima.

"Well it's not necessary to understand the entire process." said Elmer. "All we need to know is what happens in there. Let's say that we wish to receive WWV on 10.000 kilohertz. The signal comes through the front end of the receiver and is fed to the mixer. There it "mixes" with a signal from the local oscillator. The frequency of the local oscillator is 10,455 kilohertz. There are four main frequencies present at the output of the first detector. They are the original two - 10.000 kHz. and 10,455 kHz. The other two are the sum of those, 20,455 kHz, and the difference 455 kHz."

"Wait a minute," interrupted Ima. "I'll bet we are going to use the 455 kHz."

Elmer was pleased. "Right you are, Ima." he replied. "That's what is known as the IF. Of course the IF can vary from one receiver to the next. Some have two or three intermediate frequencies. We separate the various frequencies by means of tuned circuits in the output of the first detector and other stages and filters.

"There are problems with the superheterodyne design. For example, let's take the above case with the receiver tuned to 10,000 kHz. and the LO (Local Oscillator) tuned to 10,455 kHz. to produce a 455 kHz. IF. The 10,000 kHz. signal will come through just fine, but so will a signal at 10,910 kHz."

"Oh, Oh," said Ima. "That looks like trouble. Why does that happen, Elmer?"

Elmer replied, "Because both signals produce an IF of 455 kHz. Remember we said that the LO was 455 kHz from the incoming signal. Well, it can be above the signal frequency or below it. In either case it will produce an IF of 455 kHz. This unwanted frequency is known as an image. Fortunately there are ways to minimize or eliminate the image. This can be done by increasing the selectivity ahead of the first detector and in the input of the first detector itself so that the unwanted signal does not get to the mixer.

"By connecting (ganging) the tuning elements of the front end, mixer and local oscillator stages together, they can be tuned to any frequency within the tuning range of the receiver and still produce an IF of 455 kHz

"We will talk about the IF stages in our next session."

"Whew," said Ima. "This has been a good session, and I do have a better understanding of how a radio works than I did before. Although, I don't think I'm ready to build one."_

de Van, K3CP



RFI Tips

ARRL EMI/RFI Package - "RFI Tips"

Part 1 of 3

This month Ed Hare, KA1CV, Senior Laboratory Engineer, grapples with one of the most difficult problems in Amateur Radio: electromagnetic interference, or EMI. EMI is a catch-all term for TVI, RFI, BCI and any other form of electromagnetically generated interference. Regardless of the terminology, the ultimate translation is trouble!--Steve Ford, WB8IMY

You may find this hard to believe, but nearly every person in the technically-developed world has experienced EMI. At the ARRL Laboratory we receive telephone calls and letters on the subject of EMI every day.

Let's start by defining the term interference. To some people, it implies action and intent. The statement, "You are interfering with my telephone," sounds like an outright accusation, doesn't it? For our purposes, let's define interference as any unwanted interaction between electronic systems--period. No fault. No blame. It's just a condition.

Each person involved in an interference problem has individual needs, a unique perspective and a varying degree of understanding of the technical and personal issues involved. On the other hand, each of them may have certain responsibilities toward the other, and should be prepared to address those responsibilities fairly.

Whenever I host an EMI technical forum at ARRL conventions or local club meetings, I always conduct an informal survey. I ask the members of the audience to raise their hands if they've ever had an interference problem. I can always count on a 30% response, and most of the elevated hands belong to individuals who have experienced some form of interference involving their ham stations.

After taking a quick tally, I carefully explain that interference caused by electric motors, power lines, CATV leakage and spurious emissions from consumer devices must be included in the definition-- as well as interference to the their own consumer electronics equipment from all of these sources. When I see the looks of enlightened surprise, I know it's time to repeat my survey. Before I even finish asking the question nearly every hand reaches for the sky!

de Dennis, WB2LGJ , TC/ EPA

Then and now!

by John, N3IGA

It seems strange how in four years things can change in Amateur Radio.There have been a lot of changes on 2-meter also. I know a lot of people have become Hams since the introduction of No-Code Tech. Contrary to what some people say, I don't think that is the reason for the changes.

When I became a Ham four years ago, I followed the saying of "listening first" to see how to operate on any band or mode. I was always told that, so I wouldn't make a fool of myself or cause interference of some kind. I learned a lot by listening to 2-meters. Questions that I had about the hobby, or information about equipment, could be answered by just listening. You could always break in and ask for more of an explanation if you didn't understand fully. I learned more about antenna, computers, and packet over 2-meters than I could reading books on the subjects. You had the advantage at that time to pick the brains of more experienced Hams.

Now what do the new Hams have as far as 2-meters is concerned. There is bickering, arguments, and senseless conversations that have nothing to do with the technical aspect of the hobby. There are jokes made about how to do certain things on the computer that if somebody new at computers would try, it could be a very costly mistake for that person. Don't forget that not only do Hams hear the conversations, but so do people with scanners. A lot of Hams started out listening on scanners. If you haven't noticed, the more experienced Hams that use to frequent 2-meters are not there anymore to help, because they are tired of the nonsense on the air and have gone elsewhere.

Why don't we just clean up our act and repeater so that new Hams and prospective Hams can benefit from the experience that the older Hams can give. Let's help each other out and make the hobby as enjoyable and interesting as possible. Bring the fun of the hobby to the new Hams like it was brought to us.

de John, N3IGA

NEWS FROM ARRL

To make renewing your license easier, ARRL HQ, at the request of the Board of Directors will soon be sending form 610's to members whose licenses are about to expire

Hold Health and Welfare Traffic

Reprinted from the May 1994 ARRL Section Letter

Greg Pool WH6DT

During a disaster, we hear many Amateur Radio stations passing welfare traffic. It's the easiest traffic to pass, there's no time limit and it is the most visible part of emergency communications.

Many times an operator will sit on a 40 or 20 m frequency specifically because they have everything set up for a phone patch into a specific area of the country. Sometimes operators are given free long distance accounts to place those calls. Everyone can hear the anguish in the voices over the phone and the caller thanking the operator over and over for their dedication and service.

That kind of instant gratification can be intoxicating for the rest of the Amateur Community, to the point of passing welfare traffic without considering the consequences. From my own experience in disaster communications, most welfare traffic is supportive but not necessary.

In fact holding on to that initial query will probably get you an answer faster than if you had actually sent it.

Incoming vs Outgoing

Let's divide it up. There's **INCOMING** welfare traffic, where a party sends a message to a party within the disaster area; and there's **OUTGOING,** where the party within the disaster sends a message to the outside.

What does it take to run an outgoing message? It takes an operator in the disaster area and anybody on the outside willing to pass it. Usually there are more than enough volunteers to do help deliver it.

But incoming is much more intensive. Not only does the operator on the inside accept the traffic, they either finds a runner or run it themselves. Rarely are either of those choices viable options. You cannot leave your station, the person next to you already has 20 things to do, and the phone lines must be left open for civilian and civic disaster relief agencies.

Thus, incoming welfare traffic is a luxury. The victim will get word out eventually, even originate their own outgoing message. If they are dead, they are dead; your messages will not help them. If they are injured, then a disaster relief agency will attend to them; but if you are a thousand miles away, what more can you do? By sending that message, you tax the relief effort even more.

We Were Not Thinking

The Amateur Radio response to the Northridge Earthquake in Los Angeles was replete with bad habits. Many Amateur Radio operators sent and accepted incoming welfare traffic on many of the HF nets and packet; there were very few "outgoing-only" nets. In the San Francisco Bay rea, one Amateur Radio operator provided hi phone number to a local TV station so that people could contact him for incoming welfare traffic.

We were not thinking beyond just being on the air. We were not thinking about what it took to pass that traffic in the disaster area. We were not thinking about what passing incoming traffic took away from those in need.

Many of the stations accepting the incoming traffic used local phone lines to contact the disaster parties, and in the first few days the success rate was terrible. In doing so, however, it meant that someone who had emergency or priority traffic could not use the phone because it was being tied up needlessly.

It is a matter of precedence and responsibility. The best thing you can do is not originate or accept any incoming welfare messages in the first week after disaster. There's usually nothing the sending party can do anyway except wait or sponsor a disaster relief agency. Why tie up the network needlessly?

Instead, stand by to originate and accept outgoing messages. You will not handle as much traffic, and I may not hear (or see) your callsign as often, but you will have freed up an operator in a disaster area to become part of the solution and not part of the problem.

[reprinted from the ARRL's Section Leader, May, 1994]

de Greg WH6DT

editors note: *This can happen here. This is only a short example of what can happen if there is a major tragedy in this area or anywhere in the country.*

Summer time can bring Hurricanes and floods. There a few of us who remember the 1956 Floods that cost the lives of many in the Poconos and traffic including death messages were handled by members of the DLARC.

de Clarence, W3PYF

ARRL BRIEFS

From The ARRL Letter Volume 13, Number 10 May 26, 1994:

* Publishing the E-mail address for The ARRL Letter <jcain@arrl.org> - has generated some activity from club editors. Great! The text of The ARRL Letter can be downloaded from the ARRL HQ landline BBS (Hiram), in slightly expurgated form (without the photo captions). Hiram's number is 203-666-0578. When you have news that might be of interest around the country, be sure to get it to us right away, too. Thanks!

We are getting new computers here (your editor spent several nonproductive days last week learning new software and tricks) and most of us will go to PC school for a day next month. And speaking of Hiram, his human overseer is Jay Mabey, NU0X, who has been promoted to Senior Assistant Manager in the Field Services Department.

* John DeVoldere, ON4UN, visited HQ earlier this month, with Roger Vermet, ON6WU. John is the author of Low Band DXing, just out in a very revised second edition. John spend much of his time here staring at antenna modeling programs on the computer screen of Senior Assistant Technical Editor Dean Straw, N6BV.

* Stu Meyer, W2GHK, died May 21, 1994, at his home in Vienna, Virginia. He was 76 years old and a Charter Life Member of the ARRL.

According to information provided by Joe Lynch, N6CL, editor of the Quarter Century Wireless Association QCWA Journal, Meyer was past president of that organization and was president of the Radio Club of America. He was a former chief engineer for the Hammarlund Corp., later its president, and also had been employed by the E.F. Johnson Co.

Meyer was well known to DXers as a driving force behind Hammarlund's "DXpedition of the Month" operations in the 1950s and 1960s. He leaves a wife, Lottie, and two daughters. Memorial contributions may be made to the Radio Club of America or to the QCWA.

* Another recent death was that of Joseph M. Mergen, N9GID, of Mishawaka, Indiana. Mergen, 77, was the retired president of Piper Aircraft Corp. According to newspaper reports, he held 18 patents, including several for propeller design for World War II aircraft and for gas turbine helicopter engines. Among his survivors are his wife, Margaret Mergen, KE9MU.

* Jim Stafford, W4QO, an ARRL registered instructor and speaker at Educational Activities Department workshops, has been named winner of the 1994 Advanced Electronics Applications Amateur Ambassador Award.

* The FCC has canceled a fine of $2,000 against a Florida woman for unlicensed operation on 2 meters. The May 1993 Notice of Apparent Liability was against Margaret G. Taylor of Windermere, Florida, for operation on 145.53 MHz. The FCC database now lists a Margaret G. Taylor in Windermere as a Technician class licensee, KE4IMC, effective December 21, 1993. Taylor, 47, appealed the fine, saying she should have received a warning and that she was unable to pay a fine because of her age and financial condition, the FCC said. The FCC canceled the fine on these grounds and because Taylor had no previous FCC violations.

* The 1994 AMSAT-NA Annual Meeting and Space Symposium will be held October 7 to 9, in Orlando, Florida. AMSAT seeks papers for the symposium and can provide authors with help in editing and graphics, if needed. Papers are welcome even if the author is unable to attend the symposium. Topics for all amateur satellite disciplines are sought, including introductory tutorials, satellite operations, Phase IIID design and development, and new applications and techniques. Sign up now and request an author's kit, then compose a short abstract by July 1. Final drafts are requested on or about August 26. Direct inquiries to:

Steve Park, WB9OEP
12122 99th Av. North
Seminole, FL 34642

* The FCC has upheld an action against Joseph Sawchuck IV, W3OLN, to cancel his commercial license and fine him $5000. Sawchuck had served as the sole radio operator aboard the vessel Patriot; FCC regulations require two radio officers on board unless the radio officer has received a six month service endorsement to his First-Class Radiotelegraph Operator's Certificate. Sawchuck did not have such an endorsement. He argued that the fine was too high in light of the FCC's downward adjustment criteria. The FCC denied the appeal. Sawchuck, 76, is an Advanced class licensee in Pompano Beach, Florida.

73 Chris KD3OA
ARRL EPA Bulletin Manager

New Media Systems

PCS Auctions: Selling the Spectrum

By Joe Chuk, W3JD

beginning on July 24, the FCC will, for the first time, auction off rights to use the electromagnetic spectrum for two wireless commercial services. Licenses for narrowband Personal Communication Service (PCS) and Interactive Video Data Service (IVDS) will be auctioned to the highest bidders through at least July 29, depending on how long it takes to assign the first group of available licenses.

Narrowband PCS is a type of enhanced paging, providing advanced paging, two-way acknowledgment paging, and both one-way and two-way data messaging and facsimile. It will be licensed on three levels: nationwide, Major Trading Area, and Basic Trading Area. Although 3554 narrowband PCS licenses will ultimately be issued, only the ten available nationwide licenses will be auctioned in July. License auctions for broadband PCS, which will operate like an improved cellular telephone service, will be held later this year. Look for details on that system in an upcoming column. *(I don't want to take up too much room for Clarence this month! - JC)*

IVDS is a short distance system that will allow licensees to provide information, products, or services to individual subscribers at fixed locations in the coverage area. The subscribers will be able to send responses in using such services as home banking and home shopping. Television viewer interaction, as well as educational and pay-per-view programming are also possible uses for the service. Using equipment such as a set-top box developed by EON of Reston, Va., viewers will be able to see messages superimposed over broadcast or cable television programs, and then use the wireless IVDS system to respond. Of the projected 1468 IVDS licenses to be granted, 600 will be made available in the July auction.

In an attempt to make these new communication services available to a diversity of owners, Congress has directed that small businesses and businesses owned by women and minorities be given preference in the auction process. Accordingly, the FCC will set up an installment payment plan for small businesses, and bidding credits (a type of discount on the winning bid) for businesses owned by minorities and women. Because IVDS systems have relatively low associated start-up costs, the FCC hopes that the preferences in the auction process will allow potential bidders with limited resources to enter the telecommunications industry through this new commercial service.

de Joe, W3JD

Weather Radio to expand

from the W5YI report.

An interagency Task Force has begun to implement a mandate announced by Vice President Al Gore to upgrade the National Oceanic and Atmospheric Administration (NOAA) Weather Radio into an "All Hazards" radio network, extending its reach to rural users. As a first step, the group met with community members in Cherokee County, Alabama, an area hard hit by tornadoes in late March.

Agencies participating in the program are the National Weather Service, the Federal Emergency Management Agency (FEMA) and the Dept. of Agriculture. The agencies are looking for "public-private partnerships" to help fund the stations necessary.

"As events unfolded with the deadly series of tornadoes in the South, the need for increased accuracy and timeliness of weather warnings is clear," Commerce Secretary Ron Brown said. "New technology and personnel performed well and with great courage, but the weak link was that information transmitted by the National Weather Service tragically was not received in a timely way by those who needed it in outlying areas."

Few homes or churches were equipped with NOAA Weather Radio, and although there are about 400 stations, transmitters do not exist in some rural areas. During emergencies, the stations interrupt normal broadcasts with warnings and sound alarms to alert listeners. Some models of Weather Radios can demute upon receiving the alarm.

Vice President Gore said his goal is to see that Weather Radios are "as common as smoke detectors in homes" and to increase the coverage of NOAA's system so that it reaches 95 percent of the nation.

Rebroadcasting of NOAA weather forecast information on ham radio spectrum was legalized last September as part of the FCC's general relaxation of prohibited communications. NOAA Weather Radio Frequencies: 162.400, 162.425, 162.450, 162.475, 162.500, 162.525 and 162.550 MHz.

From The W5YI Report Volume 16

73 Chris KD3OA ARRL EPA Bulletin Manager

Digital Communication

by Joel, K9TBD

Electrical Engineering at Caltech

Guest article by Matt Clapp, My Nephew

As a high-schooler thinking about what I was going to do after graduation, at least a few things were clear in my mind. The first was that I enjoyed and had an aptitude for math and science. The second was my desire to create. I figured the perfect marriage of the two would be to become an engineer, and tentatively decided that I would pursue an Electrical Engineering course of study.

I applied to four colleges, and was offered admission to three. All three would have been fine engineering schools, but after visiting it, I decided I really wanted to go to Caltech. This decision was not due to a careful study of Caltech's EE department. It was due partly to Caltech's exemplary reputation to people who know about science and engineering. (Most people, however, thought I was going to CalPoly or a UC school when I told them where I was attending. One even asked if Caltech was in California.) But mostly my decision was due to some of the only 1000 undergrads I met there, who cope daily with some of the most intense courseload anywhere. Instead of mindless studying automatons going for that 4.0, I found intelligent, interesting people with a bright flame of creativity. These people, along with a loose atmosphere were students enjoy a high level of genuine self-government and freedom, were what finally clinched Caltech in my mind.

Now back to the intense courseload--if you have doubts that a scientific or engineering career is for you--don't come to Caltech. With three years of required math from Calculus to agonizing contour integrals, and two years of required Physics including Quantum Mechanics, is isn't for the faint of heart or purpose. Those are the core requirements for everybody. (Biology majors are exempted from one year of math.) From the start, the philosophy of Caltech is to create a scientific Renaissance Man and Woman. Its goal, even for engineering majors, is to expose you to such a broad base of science that you have a multitude of mental power tools to choose from and combine. In the Electrical Engineering major alone, the requirements include: Power Electronics, Signals and Systems (a very mathematical approach,) Communication Systems, and solid-state Physics of Electronic Devices, just to name a few. In addition, all of the usual courses one would expect such as Circuits and Electricity & Magnetism are covered in great detail.

Caltech's main thrust is "hard" science, such as Physics, Biology, Chemistry, etc. This is the main difference between it and most other good schools for engineering, such as M.I.T. for example. Some people even suggested to me that it was not the right place to get a "practical" engineering degree. I disagree. Anyone can get handed a cookbook of engineering equations, and follow it by rote. But by delving deeply into why and how everything works as it does, and understanding the intricate science behind the engineering, one is given true engineering insight and the ability to branch out in that many more directions of thought. In my experience, practical engineering experience is gained through just going out an building something on your own, for your own enjoyment, for an elaborate prank, or for Ditch Day--a Caltech tradition that would require at least three more pages to do justice to. Formal lab (project) classes at Caltech are also required for EE, and are also excellent.

And finally, a large majority of the homework in Caltech is collaborative, too difficult to complete by yourself. As such, you learn very early on how to work efficiently with other people, a very valuable skill in science and engineering.

So if you're interested in not just being handed the answers, and can stand to have you ego knocked down a couple of pegs, Caltech may be the place for you.

This has been a great exposition of current education from my dear nephew, Matt Clapp who is a senior at Caltech. My encouragement to all those who wish to get into electrical engineering... If you are interested in more information regarding electrical engineering, give Matt a call at his e-mail address mclapp@ugcs.caltech.edu - or drop me a note and I'll forward mail to him.. 73 Joel and Matt.....

The Internet

This months DLARC meeting presentation will be by Joel, K9TBD. The subject is Internet how it fits in with the Amateur and how it may affect our lives. Internet is the combination of 30 to 40 years of great effort from amateur to professional design and development of an "Interconnection Scheme" between many different networks. Uncle Sam promulgated the specifications of how machines should talk to one another - (right / wrong / indifferent).

Because of this desire to allow Academia and Concerns of National Interest to converse fluently, TCP/IP was born. The concept has come to fruition and now encompasses the entire world. This is well beyond the original scope.

Come join an informal interactive QSO regarding "INTERNET" - what it is, where it is, where is it going, and how may it affect our lives.

7:30 PM July 7 KIVA HALL, NCC

The MS Bike Tour

by Bob, WF3H,

MS bike tour Amateur Radio Operators in the Lehigh Valley have had several opportunities recently to demonstrate our capability to be of public service. One of the largest of these was the support we gave to the MS Society for the 150 mile bike tour between Allentown and Millersville on June 11 and 12. A truly outstanding effort was put forth by over 65 hams from 5 clubs: DLARC, SARA, Ephrata, Red Rose, and DDXA. **DLARC had 27** participants (!) which was, without hyperbole, one of the biggest events our club has done.



We provided reliable and accurate communications for the sag wagons, ambulances, staff, rest stops, dangerous intersections and other situations where timely information was essential for safety. We were called in 2 emergency situations which, of course, happened simultaneously. On Saturday, 2 riders took spills, breaking bones which required ambulance transportation to Lancaster Hospital.

Our efforts were recognized in an awards ceremony held the evening of the 12th when hams were presented with a plaque from the Society.

Ham radio is a largely overlooked public resource, and it's heartening to see a dedicated group of people willing to forgo a weekend to ensure the safety of others in the cause of fighting a crippling disease. A big WELL DONE and THANK YOU to all the participants in this year's event.

de Bob, WF3H

More MS Bike Tour

by Bruce, KA3ONZ

This week-end (June 11 & 12) I had the opportunity to assist with communications for the Pennsylvania Dutch MS 150 Bike Tour.

Amateur radio operators through out southeastern Pennsylvania turned out to perform the following functions:

1. Established and maintained an effective and efficient net control.

2. Dispatched and kept contact with 5 sag wagons, 3 ambulances, and 2 emergency medical service vehicles.

3. Took positions at many critical locations along the route, and maintained contact with net control.

4. Provided communication between tour staff members.

During this exercise, at least four different repeaters were used and the groups supporting these repeaters are to be highly commended for their cooperation and consideration over the entire weekend.

The group of operators participating included a high percentage for whom,this was a first time experience. They are to be especially commended for the speed and expertise with which they setteled into their assigned duties allowing the entire operation to proceed so smoothly!

It was a pleasure to be a small part in such an outstandingly successful operation. I'm proud to have been a participant and look forward to working with each and every one of the operators next year!

de KA3ONZ - Bruce

So you want to try Packet and don't have a TNC

Vic, N3IQD has made it possible for those who are not on packet yet to try packet if they have a phone modem on their Computer. This will connect you to his Packet BBS.

Call Vic, N3IQD at 610 740-0666 and get the info. You must have a password and he will give it to you. It will give you a chance to try packet without getting a TNC.

DLARC MEETING JULY 7 at NCC find out about the INTERNET from Joel K9TBD.7:30pm KIVA HALL

Digital Signal Processing on a budget

RADIO SHACK DSP40

by Jim Sorrells WA9ABB

Over the years, I have tried many different audio filters in an attempt to improve some otherwise poor to mediocre receivers. These have ranged from simple passive LC circuits, to active IC circuits, to rather expensive DSP(digital signal processing.)

Radio Shack has just released the DSP40. This is a relatively inexpensive DSP device ($79) compared to others on the market. This small black box (1 15/16 x 4 9/16 x 7 1/16 inches) performs much better than expected. On a cost per performance ration the DSP40 is a bargain. The controls are simple to operate. There are three nodes - CW, SSB, and NR, and three bandwiths - wide, medium and narrow. It includes a built in speaker with good audio output. The volume control also serves as the on-off switch, and there is a separate switch to bypass the unit if desired. The DSP40 requires 12v for operation. A power cord is provided. A 1/4 inch headphone jack is present on the front panel, and a 1/8 inch speaker jack is present on the back. Audio output from the headphone jack is weak. On the other hand, output from the speaker jack is quite good and works much better with headphones. The accompanying manual is a bit skimpy. It does not include a schematic and does not completely describe the notch filtering capabilities.. Fortunately the DSP is easy to operate even without reading the manual.

I have used the DSP40 with a Kenwood TS850 and with an inexpensive shortwave receiver. It made a dramatic improvement with the shortwave receiver and a bit less in the TS850 with its extra crystal filters. The DSP40 has limits and will not make every weak signal readable, but it does help in many cases. It has a notch filter which seems to magically eliminate carriers and heterodynes in the SSB and NR mode. There is only a subtle audio difference in SSB signals in the SSB and NR modes. They both reduce adjacent channel "monkey chatter" and background noise that contribute to operator fatigue. The CW mode is very effective in selecting one signal from several others. This filter is not designed for the digital modes (rtty, packet, amtor, pactor). The DSP40 also include a mobile bracket. With its small size and simple operation, it should be an asset in mobile as well as fixed station service.

The DSP40 does not perform quite as well as the JPS NIR10 which costs four times as much.. The DSP40 is a set and forget system. The NIR10 requires tuning and tweaking for optimum performance. The DSP 40 will definitely enhance receivers needing extras selectivity and noise reduction, but may not be of much benefit to a newer top of the line right with multiple crystal filters. It is cheaper and easier than adding extra crystal filters to an older rig. On a scale of 1 to 10, I rate it a 8.

reprinted from the Zero Beat, the Pikes Peak Radio Amateur Assoc, Ron Deutsch NK0P, editor.

Hats off to Ameritron/MFJ

by John W3BAL

My Ameritron AL-80A amplifier was determined by a member of the DLARC to have a faulty transformer.

I called Ameritron concerning, the matter and was told early model amplifiers such as mine had some problems with transformers.. Since my amplifier was beyond the two year warranty period they advised me to ship the amplifier to them and would give me a favorable deal.

I was charged only $60.75 (at their cost) for the transformer plus shipping and no service charge for installing transformer. All this after three years.

I think MFJ is a a good company.

73 John W3BAL

PROCLAMATION

WHEREAS, the County of Northampton has more than 500 licensed Amateur Radio operators who have demonstrated their value in public assistance by providing emergency radio communications; and

WHEREAS, these Amateur Radio operators donate these services free of charge to the County, in the interest of the citizens of the county as well as the world; and

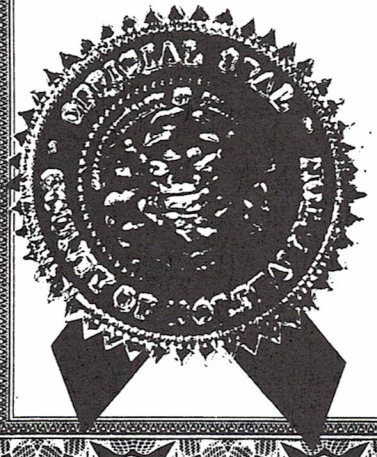
WHEREAS, these Amateur Radio operators are on alert for any emergency, local or worldwide, and practice their communications skills during the American Radio Relay Leagues Field day exercise; and

WHEREAS, this year's Amateur Radio Field Day will take place on June 25th and June 26th, 1994; and

WHEREAS, the week of June 20th to 26th, 1994 has been declared

AMATEUR RADIO WEEK

NOW, THEREFORE BE IT RESOLVED, that I, A. L. Brackbill Jr., Northampton County Executive, recognize this important emergency preparedness exercise, and call upon all citizens to pay appropriate tribute to the Amateur Radio operators of our country.



IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the County of Northampton to be affixed this 25th day of June, 1994.

A. L. Brackbill Jr.

A. L. Brackbill Jr.
Northampton County Executive

All Amateur Radio Operators are invited to
Participate to the DLARC, RACES & ARES nets
on 146.70 W3OK/RPT with an alternate of W3PYF/RPT 145.11
W3OK trustee Rick Saeger, K3OO
The Nets are held on Sundays at 9:30 AM and Wednesdays at 7:00PM

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DLARC INFORMATION LINE 820-9110

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The W3OK CORRAL is published monthly and is the Official Publication
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==1993-1994==

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--CLUB MEETINGS

All regular meetings of the D.L.A.R.C. are held on the first Thursday of each month at 7:30 PM at Northampton County Community College
TALK IN ON 146.70
Any comments or articles contributed to
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