THE DELAWARE-LEHIGH AMATEUR RADIO CLUB, INC.

NEWS

RD #4
GREYSTONE BUILDING
NAZARETH, PA
18064

AUGUST 1986

BUSY SUNDAY FOR DLARC
by Clarence W3PYF

Sunday July 20th found our group busy handling the communications for two major events, the Allentown Wheelman Bicycle race and the Easton Derriere in the Delaware. Both events, found our experience in communications paying off with congratulations from sponsoring organizations flowing in many ways. The Easton Red Cross found that we were the only method of keeping track of the tubers in the Delaware River. The Allentown Wheelman felt the same way in the professional way the communications on accidents was handled by our group. Working the Allentown event were WA3DAY, K3DVF, K3CIS, KA3MNY KC3KT, K3YD, K3NWM AND KA3NJR. On the Easton event, we had NB3L, WA3ENE, KB3RI, N3CVH, KW3W, N3AWT, KA3LPG, KA3JAL, KA3ODI, W3BPP, WA3CLC, KA3JQT, KA3MOB and W3PYF. These events prove that the practice we have had in the past has made us "professional amateurs", and there is no organization that calls on us that need be afraid that we do not have the ability and the intelligence to handle what ever the situation may be.
<W3PYF>

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VEC EXAMS

KR3U reports that there were four amateurs who took their examinations at the July session of VEC testing at the Northampton County David Eisberg, WAS3HVR from Tech to General
Robert B Montgomery, N3ERE from Tech to General
William Fahs, KC3KT, from Advanced to Extra
David Menihart, Novice
Five VEC's were present for the exams, W2CCE, W3APE, KC3II, KW3W, and KR3U. Dennis, chairman of the VEC program for the club announced that the next exam will be held on Friday October 3, allowing a vacation for the VEC's until then.

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NEW ADDITIONS TO EMERGENCY DIALING CODES

Thanks to the agreement between the City of Easton and the City of Bethlehem, you can now mark the following emergency numbers on a card and carry them in your mobile unit.

*1..Northampton County Control
To be used for any Thruway or area which may be questionable in location.

*3..Blue Mountain Control
For use in areas covered by this police and emergency number.

*4..Bethlehem City Police.
For use if in the City of Bethlehem for Emergency calls.
They will also handle calls for Bethlehem Township and Freemansburg.

*5..Easton City Police.
For use in City of Easton for Emergency Calls. Make sure you are in the city of Easton not Wilson or Palmer if this number is used.

Remember, if in doubt, use *1 for Northampton County and they will take your emergency traffic. The hang-up code remains the same.

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KAY, KC3LM IS NEW SECTION MANAGER

All of us will remember the visit by Kay Craigie, KC3LM to our meeting in the past, and she is definitely no stranger to those who have been handling traffic or particpated in the "Hands Across America" team. Kay has be elected as SM for the Eastern Pennsylvania Section and will take over in October from Jim Post, KA3A who has resigned from his post. Jim will however remain as affiliated Club Coordinator. Our own Tom Teel KB3UD will remain as Section Traffic Manager. As editor of the EPA Feedline, the news of the Eastern Pennsylvania Section, she has done a super job, in editing a great newsletter.

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LETTER FROM THE PREZ

What a good Field Day! If you missed it, sorry. If you were there, thanks. There was plenty to eat, drink and there were plenty of rigs to operate. 5 altogether. This field day was the least amount of time I have operated at Field Day, thanks to all the operators and loggers that shoed up. Except for early Sunday morning, all the rigs were kept busy. It was fun to sit back and watch this year. K9TBD and seven assistants were finally able to get two equal lengths of wire for a 160 Meter dipole. W2CCE tried in vain to reach a Russian Satellite, but maybe his Russian wasn't too good; after several 807's, K3oo was able to put up a 3LBS (3 element big signal) on 40 meters; W3PYF kept searching for a crystal for 3999; W3BPP impressed the news reporter with his packet setup; KA3MNY entertained us with his accordion; KA3OIG did a fine job with the novice station; KA3LBN and N3BL kept our stomachs full; KA3ODI had the battery bubbling with his solar power setup. The rigs sure got a workout with a total of 2301 QSO's. A new record for the DLARC. Thanks to everyone who helped.
Tony <K3ZUF>

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EXECUTIVE COMMITTEE MEETS

The ARRL Executive Committee met in Portland, Oregon, on June 13-14, among a number of of FCC related matters. ARRL Counsel was directed to: - File a petition for reconsideration concerning the denial by the FCC Chief Engineer of the ARRL petition for rulemaking to require the labelling of home entertainment equipment with respect to its immunity from radio frequency interference. - File comments in PR Docket 86-63 in which the FCC proposes to establish certain technical parameters for private land mobile operation in the 430 MHz band within a 50 miles radius of Detroit, Cleveland and Buffalo (Line A), to reduce the possibility of interference between land mobile and amateur stations. - File comments in support of PR Docket 86-161, enhancing Novice privileges. The comments will argue that Novice privileges in the 220-MHz band are an intraservice matter and not affected by the moratorium on new allocations to the band. The comments would also urge the Commission that Novice examinations be supervised by two volunteer examiners rather than one, as stated in the original ARRL Petition for Rulemaking. - PR-86-207, the proposed authorization for F8E emission, was deferred to the July meeting of the full Board of Directors. The National Association of Broadcasters request for federal preemption of regulations regarding the biological effects of radio frequency energy was referred to the ARRL Ad Hoc Committee on Biological Effects of RF Energy. Minutes of the Executive Committee Board meeting will appear in August QST.

DIANE SEZ
by NB3L

The July meeting held at the EMA headquarters in Nazareth found 39 members present. Two new members were welcomed into the club, KC3SM, Chuck Spangenberg and Donald Meinhart, no call yet, but expect a novice call in the near future. A recap of Field Day was presented. 2371 contacts were made, 400 more than last year. Having just finished duping the logs, I am happy to report that we had very few dupes.

Setting up was a lot of fun as usual. We were unsuccessful in making a satellite contact and no contacts were made on 160 meters, but we did well in every other category including packet and solar power. The worst part of the entire weekend was an overabundance of aggressive June bugs. (editors note) They were hungry too Diane. Bill, N3BIB, was presented with his 3rd place PA QSO Party plaque at the meeting, since he was unable to attend the banquet. Upcoming events for July were announced,

July 12, Bethlehem Bike Race 9-12
July 20, Derriere in the Delaware, Easton 9:00 to 4:00
July 20, Allentown Bike Race 12-4

Hope that you found time to represent your club at one or more of these events. A discussion ensued concerning the proposed changes to the constitution and bylaws. Some suggestions were offered and will be reviewed by the board of directors before presentation of the final draft. A gift of $500.00 was presented to the club from the estate of Bruce Cope, KB3LF, to be used as the club desired. The Board was given suggestions on possible uses. A thank you note was sent to Bruce's mother. She will also be notified as to how the money was used. See you in August..
de Diane NB3L

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FOR SALE

KENWOOD TS-530ST 1 year old. $475.
MC-50 microphone $40
DAIWA CN-720 dual needle swr/pwr meter. $100
BUTTERNUT HF6V with radial kit $125
All offers considered.
CONTACT: Bill N3WA at 434-0086 after 6PM

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CANADIAN AND U.S. RECIPROCAL OPERATING

A few years ago, the FCC, and the Canadian counterpart, the Department of Communications (DOC) agreed to automatic reciprocity. Thus, Canadian radio amateurs visiting the US and United States amateurs visiting Canada no longer need reciprocal operating permits from the country they are visiting. Visiting amateurs must confine themselves to both the host country's restrictions and their home restrictions. When you travel across the US/Canadian border, it's always a good idea to have your original license with you.

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FCC TO FINALLY DO IT!
by Clarence W3PYF

In a conversation with W5YI, Raymond A. Kowalski, the Chief of the Special-Services Division of the FCC) Washington, DC and overseer of the Personal Radio Branch of which the Amateur Radio Service is a part said that they would in the near future begin to respond in a big way to the cases of malicious interference . In plain words, they will respond with monetary forfeitures or in English, a fine...probably on the order of a thousand dollars or more. In response to interference charges the field bureau will respond unless the case involves a repeat violator..people that got one or two large forfeitures imposed upon them and continued to operate the FCC would then after the first of July begin full legal proceedings in addition to the fine. In addition Ray added that although Congress has not acted on any changes in the amateur regulations with regard to the fines, the FCC has made their recommendations and it is now up to the Congress to follow up on them. The biggest thing that the FCC now is working on however, even more important than the interference problem, is the changes that may come in the granting of voice privileges to the Novice..He stated "The comments are coming in from the amateur community and I have seen comments pro and con. I would say that even in terms of just the raw numbers that there is no clear trend emerging." He commented that one writer suggested that the FCC simplify all amateur license classes by just having a Novice License, Apprentice License and a class to be know as a Master Operator. He added "people are thinking about the various license classes and what the privileges ought to be. I would say that everything is fair game as the FCC tries to explore ways to make the Amateur Radio Service attractive and continuously so." If any members of the club have any suggestions on this matter they should be sending their ideas to the FCC and let them know of your feelings on these very important matters.
<W3PYF>

EDITORIAL
by Clarence W3PYF

Continuing my feelings of last months column here, and in order to bring you up to date, by a 34 to 0 vote, the Electronic Communications Privacy Act has been approved by the House Judiciary Committee. Although amateur radio is specifically exempted from the Act, the legislation still makes it a crime to monitor certain portions of the radio spectrum. It has strong support of certain segments of industry.. particularly those firms associated with the cellular telephone business. In a brief and sparsely attended June 23rd session, the US House of Representatives, by voice vote, passed HR 4952, the Electronic Communications Privacy Act of 1986. There was no discussion or debate.. and no amendments were offered from the floor. Since this was a voice vote, we cannot tell who voted for against the bill. Conference arrangements will now be made with the Senate to work up a mutually acceptable electronic privacy law. The House was only in session for 45 minutes that day. the inattentive and slipshod approval was termed "amazing in view of the controversy and the complexity of the bill" by the Association of North American Radio Clubs who represent many SWL and scanner enthusiast groups. Remember that amateurs owning a scanner or shortwave receiver could be exposed to committing a felony (and a prison term) by tuning across small groups of forbidden channels scattered all across the radio spectrum. While the bill is very controversial, most of the news media is downplaying the opposition to the bill whatsoever. The interesting part of the entire fiasco is that the FCC is on record as being opposed to the bill. Senator Patrick Leahy has introduced an identically-worded bill, S 2575, for consideration by the Subcommittee on Patents, Copyrights and Trademarks. A subcommittee aide "expects it to move very quickly", with a mark-up session likely sometime after the Congress holiday recess. It is interesting that the Justice Department has indicated that enforcement of the radio provisions of the bill would be virtually impossible, except in cases of flagrant violations. The FCC (which was not invited to testify on the House Bill) has suggested that the Communications Act of 1934, which permits reception but not divulgence or beneficial use, is an appropriate standard for the protection of communications when the method of transmission itself makes the communications to anyone within range. The W5YI report adds that while the bill purports to protect electronic privacy, it does not and may even be detrimental to privacy since it reduces incentives that presently exist for truly protective measures...such as encryption. The feelings of this writer is that it is about time for us to begin writing to our senators about these problems, before it reaches the Senate floor.

<W3PYF>

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DOUBLE TROUBLE

FCC has assessed monetary forfeitures against a father and son, Albert and Eugene Kuklin, of Tucson, Arizona. Albert was fined $750 for operating an unlicensed station under a now-vacant call sign, K9LUX, through a repeater. Eugene, who is K7KCA, was fined $300 for aiding and abetting the violation, transmission of a false call sign and communication with an unauthorized station.

BRING NEWCOMERS INTO AMATEUR RADIO

Do you want to help bring newcomers into Amateur Radio? If you are a part of the ARRL Field Organization or an officer of an ARRL-affiliated club, check the July 1986 issue of Field Forum for an article entitled Clubs: The Future of Amateur Radio. In it we explore some of the leaks in the system where we lost people interested in joining our hobby -- and what to do about plugging them.

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AMATEUR RADIO BOY SCOUT MERIT BADGE PAMPHLET

The Boy Scout Amateur Radio Merit Badge Pamphlet has been rewritten by Mike Brown, WB2JWD. The new edition replaces one that was written by HQ staff member Perry Willians, W1UED, nearly 25 years ago! The Boy Scouts of America national headquarters reports that the pamphlet should be available in September.

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Owen Garriott, W5LFL Resigns From Astronaut Corps

Owen Garriott, W5LFL, has resigned from the Astronaut Corps. W5LFL was the nation's most experienced current space traveler, having spent some 1650 hours in space. Garriott said he was leaving because the Shuttle has been grounded as a result of the January 28 Challenger accident and he expects a three to four year wait before he could fly in space again. Garriott spent 59 days aboard Skylab in 1973, and nine days in 1983 on the Shuttle's first Spacelab mission. On his shuttle mission, Garriott operated two- meter FM, working over 275 stations. Garriott is expected to become a private consultant.

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NEW JERSEY MAN FOUND GUILTY OF SENDING FALSE SIGNALS

Federal District Judge Garrett E. Brown, Jr., ordered Bruce Humenik of Maple Shade, New Jersey, confined to a Federal Prison Facility for a period of 90 days for psychiatric study. Mr. Humenik threatened to injure another person in violation of Title 18 USC Section 875 (c), which carries a maximum sentence of five years imprisonment and a $250,000 fine. After the 90-day period, Mr. Humenik is to reappear before Judge Brown for sentencing. On April 21, 1985, Mr. Humenik was found guilty in Federal Court for transmitting a threat to injust a United States Coast Guard employee on a marine radio. In May of 1984, Humenik broadcast false distress signals indicating to Coast Guard personnel and other agencies that he was on a vessel which was sinking or on fire. The broadcasts were on Channel 16, a radio frequency reserved by law solely for distress signals and other emergency broadcast. In separate action, Wallace Anderson, also of Maple Shade, New Jersey, was fined $1,000 by the FCC for operating on marine frequencies without a license. Anderson made unauthorized transmissions on marine channels 10 and 16, causing interference to marine operations and the US Coast Guard.

FROM THE ARRL NEWSLETTER

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ARRL MEMBERSHIP INCREASES

ARRL membership has increased from a year ago. The total as of May 31, 1986 was 139,910. This is a 10,000 member increase from last year. The 1985 totals were 129,698. The May 1986 totals include 126,281 Full Members, 10,982 Associate Members and 2,638 subscriptions.

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A SAD POSTSCRIPT TO FIELD DAY

Just at press time, we received word of a Field Day accident which cast a shadow across this usually fun and festive occasion. North Dakota Section Manager Mike Mankey, WBOTEE, was killed when an antenna he was helping to install at a Field Day site came into contact with power lines. The unfamiliar site had trees that looked ideal as antenna supports, but it was discovered -- too late -- that there were power lines hidden between them. Mike was 36 years old. Our deepest sympathies go out to his family. While it cannot in any way reduce the loss to Mike's family, and to the Amateur Radio community, we hope this note will remind all of us to put safety at the top of the check list for antenna projects, at home or in the field.

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THIS SPACE IS AVAILABLE

TO ANY DLARC MEMBER.

SAY SOMTHING SO WE KNOW YOU ARE ALIVE.

WHETHER IT BE AN ARTICLE OR JUST A

NOTE ABOUT A FAVORITE PIECE OF GEAR.

SHARE IT WITH EVERYONE!

DIGITAL COMMUNICATIONS
Joel A. B. Elston, K9TBD

Let's "C" ----------

Recently I got involved in the computer language 'C' because of some work with Bell Lab's. 'C' has been claimed the language of the future - and the language of now! After reading this article - "Let's C".

In 1978 two bright fellows (Kernighan and Ritchie) from Bell Lab's made up the language called 'C' - a precursor was 'B' - but this in not a history lesson. They made up this new computer language out of frustration (I presume) because assembler is too involved but FORTRAN has too many restrictions. 'C' is between. They used it to write most of the operating system called UNIX. 'C' has the power of assembler, the ease of coding of FORTRAN - but it has a structure like the modern structured language PASCAL. All these good features and no faults? Probably yes.

Here is my experience with 'C':

1. 'C' is not for the beginner!
2. 'C' is not for the hacker!
3. 'C' is for the professional jock!

'C' is much more complex than assembler yet it allows assembler like coding -

a) on-line comments
b) free form source code
c) 'C' usually has an indented structure - but not required
d) pointer structure which allows addressing anywhere - 'you can even blast the operating system easily - without even thinking about it!

'C' is not a compiler; 'C' is not an interpreter (however I have both) rather, 'C' is a definition of a language which is pretty much machine independent. Once you get down to the nitty gritty, machine dependence is there - i.e. how many bytes for an integer or floating point number - etc. However, it is the most machine independent language that I know of! For example I can compile and run code on my C-64 which I wrote on a P.C. clone (AT&T 6300) running MS-DOS with little or no modification to the source code. In that regard - how does 'C' compare to the "native mode" of an arbitrary machine?

	FLOATING POINT TESTS	x = sin(PI/5) 1,000 times
AT&T 6300	Assembler - optimized *	0.85 using 4 registers
	Microsoft Compiler *	0.88 using 2 registers
	C-terp	8.02
IBM AT	Microsoft Compiler *	1.25
	C-terp	8.32
IBM PC	Microsoft Compiler *	1.54
C-64	BASIC - optimized	55
	ABACUS 'C' as is	58 (more digits accuracy)

* These tests used the 8087 math coprocessor.

	INTEGER TESTS	x = a/b 100,000 times
IBM AT	Microsoft Compiler	2.3
AT&T 6300	Microsoft Compiler	5.00
	C-terp	363.4
IBM PC	Microsoft Compiler	9.03
C-64	BASIC	650
	BASIC (% - integers)	730
	ABACUS C	180

Recommendations for the small computer user (like a C-64):

- o Small programs - use BASIC
- o Large programs - use C
- o To prove a principle - use BASIC
- o To do it right - use C
- o To become frustrated - use BASIC
- o To really become frustrated - use C
- o To set bad habits - use BASIC
- o To 'C' the light - use C

My vote is for 'C' for the for-C-able future!

CcCcCcCcCcCcCcCcCcCcCcCc 73's Joel, K9TBD cCcCcCcCcCcCcCcCcCcCcCcC

NORFOLK I. - Kirsti, VK9NL and Jim Smith, VK9NS, back from their trip thru the USA and Europe, are near 14,300 KHz nightly from 0300 UTC in addition to their later net on 14,220 KHz. While Kirsti was busily typing responses to bundles of QSL cards, Jim was thinking aloud about the pros and cons of a return to Heard Island in early '87. VK9NS is also active daily near 3795 KHz from about 1030 UTC. QSL to their CBA.

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SO. COOK IS. - 1-4 August. ZK1XE by WB6GFJ. Ross is presently signing FOØFB on Tahiti and is usually on 14,145 or 14,195 KHz. His August itinerary includes ZL, VK, 3D2 and KH6. QSL to home CBA. .. ZK1XV on 14,215 KHz at 0415 UTC. QSL: VK2BCH.

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SO. PACIFIC DXpedition - 7 July - thru August. FOØFB, by WB6GFJ, on Tahiti from 7 to 17 July and then from 20 to 31 July on the island of Takaroa in the Tuamotu's. (Operation on the latter Island will be dependent on the availability of a-c or battery power). On 1 August, Ross will QSY to the So. Cook Islands where he will sign ZK1XE for 4 days on his favorite 14,145 or 14,195 KHz frequencies. His junket will continue thru August with visits to ZL, VK, 3D2 and KH6. If OSCAR 10 gets back into service between 10-17 July, look for FOØFB around 145.900 MHz ssb. QSL to the CBA of WB6GFJ.

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TANZANIA - Now thru Sept. 5H3RB by NM2R should be fired-up on 20 about now. ... 5H3ZR is on 14,175-185 KHz daily from 2100 UTC. QSL via OH6IQ.

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WAKE I. - NH6FU/KH9 is often in the W7PHO Family Hour on 14,227 KHz around 1600 UTC and in the Brown Sugar Net on 14,309 KHz from 0130 UTC. QSL to Bob Smith, Box 86, Wake Island 96898.

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W. SAMOA - 5W1DZ and 5W1FT are a daily duo in the Brown Sugar Net on 14,309 KHz from about 0200 UTC. QSL 5W1DZ via WB2LVB; 5W1FT to Box 184, Apia, W. Samoa.

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KALININGRADSK - UZ2FWA on 14,228 KHz at 2100 UTC. Nick said that he will continue this schedule during the Summer months. QSL via Box 88, Moscow.

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KAZAKH - UL8PYL is on 14,180-185 KHz most days from about 0200 UTC. QSL via Box 88, Moscow.

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MACQUARIE I. - VKØSJ on 14,285 KHz from 0300 UTC accepting skeds for 160 meters and for RTTY on 14,090 KHz. QSL via VK7RM.

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MINAMI TORISHIMA - 7J1ACH by NJ7D, alternates between 14,020-30 and 14,200-225 KHz daily from 0600 to 0800 UTC and again from 0930 to 1130 UTC. QSL via NG7X.

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ALGERIA - 7X2LS selects either 14,183 or 14,227 KHz for his frequent appearances from about 2000 UTC. QSL Sadek to his CBA.

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ANDORRA - C3ØC on 14,008 KHz from 1900 and on 14,192 KHz at 2330 UTC. QSL: F8RV.

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BULGARIA - Attention Prefix Hunters! LZ92S is the special callsign assigned to the City Students' Radio Club as part of a project to gain international support for the ongoing effort to attract the 1992 Olympics to Sofia, Bulgaria. On all bands, we have thus far worked them on 14,220 KHz at 0010 UTC and on 7006 KHz at 0315 KHz. QSL via LZ1KDP.

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BAHRAIN - A92BE on 14,190 KHz from 2200 UTC. QSL Don to P.O. Box 26803, Bahrain.

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FRANZ JOSEF LAND - UV1OO is regularly on 14,010-014 KHz from 0100 to 0300 UTC. QSL to Box 88, Moscow - marked "For UA9LBR".

CANADA'S HAM GROUPS SUPPORT "NO CODE"

The two national amateur radio organizations in Canada have filed joint comments on the DOC (Department of Communication's) Discussion Paper on a Possible Restructuring of the Amateur Service in Canada. It may result in North America's first no-code entry level ham ticket. Presently, Canada has three amateur radio operator classes. Advanced, Amateur and Digital. There is no entry level "Novice" license in Canada. The digital license is a "no-code" ticket, but can't be considered entry level since it requires an extremely difficult written examination. It is also not very popular. The Canadian Radio Relay League and Canadian Amateur Radio Federation join comments suggesting two amateur radio operator classes plus a code endorsement represent the official position of the two groups. Their extremely well done comments recognize the needs of the Amateur Service as well as that of Canada's regulatory body. NEEDS OF THE AMATEUR SERVICE: (1.) More and younger radio amateurs (2.) High standards for all classes (3.) Strong incentives to upgrade (4.) A continuing role for Morse code (5.) Continuing stress on experimentation (6.) Compatibility with reciprocal operating agreements (7.) Viability in the eyes of the internationa amateur radio community NEEDS OF THE DOC INCLUDE: (1.) Ease of entry into the Amateur Service (2.) Simplicity, resulting in less administration and lower costs (3.) Recognition that many amateurs and prospective amateurs are more interested in 'communicating' than in the technical aspects of amateur radio, and: (4.) A structure that will remain viable into the next century The combined position was jointly signed by CARF President, Ronald Welsh, VE3IDW, and CRRL president Thomas B. J. Atkins, VE3CDM. Atkins is also a Director of the ARRL. Their proposals (which deviated somewhat with that of the DOC) recommend: (1.) The entry point would be call Certificate "B" or the Basic certificate. Certificate "A" would be the highest class. (2.) There would be a written test based on 40 hours of study of basic electronic theory and circuits, receiving and transmitting systems, antennas and propagation, station setup and operation, interference prevention as well as a regulations test. (3.) There would be no code test to "make the certificate attractive to computer buggs and others that view Morse code as interesting but old fashioned." (4.) Holders of the entry level Certificate "B" would be permitted to use all modes on amateur frequencies above 30 MHz including access to the 144-148 MHz 2-meter band "to ensure that these amateurs come into contact with good operators who would serve as role models." (5.) Holders of Certificate "B" would be limited to 100 watts to the final stage of the transmitter and would not be permitted to become licensees of repeater or remote-base stations. (6.) Homebuilt or modified commercial transmitting equipment would be permitted - "an amateur tradition". (7.) A 7 WPM Morse Code Endorsement would be offered for Certificate "B". Holders of a Code Endorsement would be permitted to use radiotelegraphy and radioteletype on amateur frequencies below 30 MHz and radiotelephony in the 28-29.7 MHz amateur band. Holders of Certificate "B" with a Code Endorsement would be permitted 250 watts input. The comments note that "Fourteen jurisdictions around the world give holders of entry-level certificates radiotelephone privileges in the 28-29.7 MHz band. Such privileges are being considered in the US. In this structure, such privileges would be a strong incentive for obtaining a Code Endorsement and joining the mainstream of amateur radio." (8.) The highest-class and only other certificate would be called Certificate "A" or the Advanced certificate. There would be a written test based on 20-30 hours of study of advanced electronic theory, receiver and transmitter circuitry and antenna systems. There would be a Morse code test at 12 WPM. (9.) Holders of Certificate "A" would be permitted to operate all amateur modes on all amateur bands using maximum legal power. (10.) Candidates would be permitted to try both Certificate "B" and "A" and the Morse code tests at a single test session. There would be no time limit on the validity of any certificate, i.e. lifetime licenses. (11.) Present "Amateur" certificate holders would be grandfathered into Certificate "B" with code endorsement with right of full legal power. Present "Advanced" certificate holders would be qualified for Certificate "A". "Digital" certificate holders would be deemed to have all qualifications for Certificate "A" except the code. The combined groups felt it important that no Canadian amateur lose present privileges. The CRRL/CARF commented that the DOC may have no alternative, however, but to give all "Amateur" certificate holders Certificate "A". They said they were concerned that this may cause resentment among amateurs who received their full privileges only after considerable extra study and a second examination.

FROM THE W5YI REPORT

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1986 VEC CONFERENCE

The 1986 Conference of Volunteer Examiner Coordinators (VEC) will be held in Washington, DC on August 8. FCC's Ray Kowalski, Chief of the Special Services Division, which oversees the Personal Radio Branch, of which the Amateur Radio Service is a part, will be the official host. Both ARRL VEC Department Manager Jim Clary, WB9IHH, and Assistant Manager Don McGrath, KZ1A, will attend. The ARRL VEC now has over 7,800 accredited VEs in its program.

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FROM THE OLD MAN
by Clarence W3PYF

Well she got it! What did she get, Diane who we know as N3BHF is now NB3L. Again congratulations Diane from all of us. Dennis, KR3U and his gang of VEC's had one of their best DX stations the other night when one of the amateurs from the Scranton area came down to take his test. P.S. he passed...On Saturday the 12th, 9 members of our club under W3CE participated as communications for the Future Cycling Champions Club, and they proved their worth to those involved with the number of accidents they had to report. With Al were KB3RI, KA3MNY, W3BCA, K3CIS, KC3CR, W2CCE, K3DVF AND WA3BOM. As usual, the experience our group has gained in communications paid off with W2CCE reporting 7 cyclists down at one time. Bob KB3RI complained because he only had 3 at one time. Jack, WA3BAO is sporting a new 757SX Yaseau combination and he is very happy with it. I talked to Don W3LR as he was driving south to Florida with Jan on vacation. Don was on 40 meters with a super signal from near Richmond. N3ACZ is testing his radios in a new van, seems like he just got them working in the old one. For those of you who missed the last meeting or missed seeing the piece on Field Day that Channel 69 did on our group, it was amazing, the interviewer just held the mike in front of Prez K3ZUF and I thought that the cameraman would run out of tape before he quit. Good job, Tony. As program chairman for the month for the Easton Kiwanis, I wanted to show the versatility of amateur radio operators, and for the five Wednesday's in July, they heard from K9TBD, N3BDC, KU3K, WA3HDP and me, and not one of us talked about amateur radio. When I started to look for speakers, I realized that with all the occupations we have in our group, I could have filled the roster for a year. You never know when someone is listening on 70. The other night when Dennis was looking for a backup VEC for the testing during July, I made the remark on 70, "I wonder what happened to KC3II, I haven't heard from him in over a month!" You know of course what happened, Don broke in, "I'm here", he said "just working long hours". Of course he came to Nazareth to help Dennis. Some members of our club did a yeoman job in getting the tower down at K3MAZ's place and kept enough of it up to let him remain on the air. The emergency auto- dialer did its thing again this month, at least 6 times, members called to report accidents or broken down vehicles. It is important that if you do report a problem, that you make sure you know where you are, to keep from confusing the police or fire departments. Gunner, KA3KAS, from Reading has been doing a good job in making the repeater and reports that he will be returning to Lehigh in the fall. As I write this, I hear the gang moving in on K3NZ's QTH, for an antenna party, understand this will go well providing the beer holds out. One big disaster discovered while all the climbers were enroute, Norm had no soda for Barry KU3X. Roy, KA3MNY, is doing a good job of minding the 70 store. He is listening just about all the time, and its good to have someone there to talk to when an emergency arises. I enjoyed seeing W3ZXS at the last club meeting, first time I had a chance to feel his bald head in about 5 years. Do it again, Jim!

73's 'till next month,
Clarence

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CB VIOLENCE

An 11-meter CB transceiver in La Habra, CA, has been shot to death by an armed intruder. According to the Orange County Register, Dennis Carrico was talking on his CB set after midnight when he sensed that he was no longer alone. Carrico turned and saw a stranger with a gun standing over him. The gunman ordered him to turn off the CB and move away from it. Carrico obeyed, after which the visitor shot it three times and quietly left. Carrico was not harmed, but his $500 transceiver was destroyed. Police theorize that the attack was in retaliation for TVI. Remember it could happen to your 940!

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COMPUTER OPERATED AMATEUR RADIO STATION

Larry, "Tree" Tyree, N6TR, of Beaverton, Oregon, used what may have been the first completely automated computer operated Amateur Radio Station during Field Day this year. N6TR made a number of CW contacts using a Z80-based computer and some experimental software which ran a TS-430 transceiver using battery power without the need for any human assistance. The software tunes the receiver, locates the station to call (it only answers CQs so far) completes that QSO, prints out a record of the contact and continues to scan for a new QSO. N6TR notes that there is still a long way to go before it can come close to matching a human operator!

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JAS-1 HANDBOOK

The JAS-1 Satellite Handbook is now available from Project OSCAR. Originally available only in Japanese from JAMSAT, the English language edition is an exact translation. Packet enthusiasts and others will find much of interest withing the pages of this handbook. It is priced at $10 from JAS-1 Satellite Handbook, Project OSCAR, Inc., PO Box 1136, Los Altos, CA 94023-1136. Tnx WB6GFJ.

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HAMFEST CALENDAR

August is a great hamfest month. Get your bargains for the fall and winter building season.

August 10- Warrington, PA.
Bucks County Drive-In. Rt. 611
8 AM - Talk in 66/06 or 52
$3.00 admission, $2.00 more to tailgate
This months best fest recommendation.

August 16- Brewster, NY (South of I-84)
J.F.K. Elementary School.
9 AM - Talk in 144.535/145.135
$3.00 admission, $2.00 more to tailgate
VE EXAMS

August 17- Georgetown, DE
Delaware Technical College
US-113 at Del. 18. 8 AM
Talk in 147.075 or 52
Admission $3.00 VE EXAMS

August 23- Oakland, NJ (N.E. NJ near George Washington bridge.
Oakland American Legion. 8 AM?
Talk in 147.49/146.49 or 52
Admission $1.00, tailgating $3.00

August 23- Ithaca, NY Trumansburg Fair-grounds. State Route 96. 12 mi. N.W. of Ithaca. 8 AM Talk in on 96/36.
Admission $3.00 Tailgate $1.00

August 24- Camp Hill, PA
Penn Harris Convention Center. Rts. 11&15
8 AM Admission $4.00 Talk in 145.47 or 52
VE EXAMS, Seminars

August 24- Mullica Hill, NJ (12 mi. S. of center city Phila.; exit 2 off NJ Tpk.)
8 AM Talk in 147.78/.18 or 52
Admission $4.00 VE EXAMS, YLRL, Kids pgm.

August 31- Lancaster, PA - Red Rose Computerfest. Gurnsey Pavillion, Rt. 30 at 896. 9 AM Admission $3.00

Sept. 7- Gaithersburg, MD. Montgomery Co. Fairgrounds. 7 AM Talk in 146.04/.64 or 52
Admission $4.00; Tailgating $5.00
VE EXAMS, Commercial exhibits.
Always a great hamfest-early Septembers best choice.

HAMFEST REVIEWS
Tamaqua, PA - May 18 - A BUST. We've been to better garage sales. Skip this one.

Wilkes-Barre - July 6 - A good fest at a good location. Well attended. Lots of tailgaters, few vendors. Lots of VHF stuff & good deals on parts. (Sorry Barry, NO vacuum variables.) A good place to meet the faces which go with the calls on .045 and .865. Get to this one next year.

Starting in October - A multi month series on winter horse trading for amateur gear. Watch for it!

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EPA Proposes RF Exposure Limits
From the ARRL Newsletter 7/7/8

The Environmental Protection Agency has proposed to limit public exposure to RF radiation from communications. The Agency noted that presently there are no federal standards limiting public exposure to RF radiation, and biological effects have been observed in laboratory animals exposed to RF radiation in experiments. The EPA proposes four alternatives for controlling public exposure to radio frequency energy. What will eventually emerge from the process will be guidelines for the other federal agencies. The Federal Communications Commission, at its discretion, may apply the guidelines to its licensees. Two of the EPA alternatives are much stricter than the ANSI standard C.95.1- 1982 (which sets limits of energy at 100 milliwatts per square centimeter at 0.3 to 3 MHz, dropping to 1 milliwatt per square centimeter at 30-300 MHz, then rising slightly to 5 milliwatts per square centimeter at frequencies above 15 GHz). The EPA makes the matter more confusing for laymen by using different references. It talks of whole-body average specific absorption rates or SARs, expressed in watter per kilogram of body mass (W/Kg) for frequencies above 3 MHz! For frequencies below that, a different kind of standard is used, placing separate limits on the electric field and magnetic dfield intensities. The tightest guideline would have an SAR of 0.04 W/Kg above 3 MHz, with the electric field intensity at 87 volts per meter (V/m) and magnetic field intensity at 0.23 amperes per meter (A/m). This guideline is said to be similar to that imposed in Portland, Oregon. It would cost the broadcast about $34,000,000 to comply with this guideline, the EPA says. The next level would have SARs of 0.08 W/Kg, electric field of 275 V/m and magnetic field of 0.73 A/m. The cost to the industry would be $22,700,000. The third level would have SARs of 0.4 W/Kg, electric field of 614 V/m and magnetic field of 1.63 A/m. Broadcasters compliance costs would drop to $12,400,000. This level is said to be equivalent to the ANSI standard. The fourth option is nonregulatory: public awareness programs to distribute information on health effects and environmental measurements, and providing technical assistance to states and federal agencies. Since the actual proposal was not available at press time, it's unknown whether the proposal will effect radio amateurs or even what the Docket number is for filing comments. The ARRL will lean heavily on its volunteer panel of experts, the Committee on the Biological Effects of RF Energy, for advice on what our position should be. Stay tuned for further information.

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All Amateur Radio Operators are invited to participate in the EMA Nets on 146.70 W3OK rpt. The Nets are held on Sundays at 9:30 AM and on Wednesdays at 7:00 PM.
The alternate repeater for these Nets is 145.110 W3PYF rpt.

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The DLARC NEWS is the Official Publication of the Delaware Lehigh Amateur Radio Club Inc.

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1986
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CLUB MEETING NIGHT

All regular meetings of the D.L.A.R.C. are held on the first Thursday of each month at 7:30 PM in the Greystone Building at Gracedale.
Phone....759-2600

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Any comments-questions-or articles contributed to this newsletter should be addressed to:

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THE DELAWARE-LEHIGH AMATEUR RADIO CLUB, INC.

NEWS

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Raymond P. Bilger W3TDF
RD#1 Box 178 State Road
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MEETING NIGHT
THIS THURSDAY
7:30 PM