Delaware - Lehigh Amateur Radio Club, Inc.

W3OK Corral NEWSLETTER

MAY 2002

CLUB meeting on May 9th

Guam, USA.....

by Phil, KH2EI

US Territory , about 3 hours jet flight due south of Tokyo and 3 hours due east of Manila. It's only 35 miles long and 7 miles wide at the very widest, taking about 3 hours to drive around the entire island. With exquisite beaches and volcanic mountains, lying between the West Pacific Ocean and the Philippine Sea, it is also the closest land mass to the famed and Marianna's Trench , the deepest part of the ocean on our planet.

There's less than a dozen active hams in a permanent population of 150,000 +.

The **KH2/KG6/AH2** calls are highly sought after DX prefixes and I was fortunate to live on island from 1989-1992 and again from 1994-1999.

The Island infrastructure is so fragile that it is not uncommon to loose electricity and water daily several times for hours at a time, not to mention the monthly torrential rain associated with year around typhoons causing power outages lasting for weeks. Therefore, field day exercises are a normal part of living and radio operations.

On May 9th, I'll present a 25 minute program with film and photos of Amateur Radio Operations on Guam with my narration and answers to questions posed by our group. I'll include some personal memories and humor and my development of this fine hobby in what has thus far been the wildest time in my life with regard to ham radio. I hope you'll join me in this informative program.

Phil Weber KH2EI

MS WALK Easton and Bethlehem Sunday April 21, 2002

by Jeff, N3QZT

On a rather cool and somewhat rainy Sunday two small groups of hams got together to provide communications for the Multiple Sclerosis walks. One in Easton's Hugh Moore Park going from the canal boat launching area to the canal museum and back and the other starting at Sand Island, Bethlehem and going to Canal Park in Allentown and then back. Both events ran very trouble free and no problems were encountered that the hams present were on able to over come.

I would like to thank the hams that gave up a portion of there Sunday to lend a hand, they are. The Easton group: N3XRL/Malcolm, KA3JWE/Don, N3ZSR/Jill, KE3AW/Bob, N3ULW/Glenn, AI3D/Eric, Gregory/son of KB3FIH, and the KB3FIH/Bruce who was Net Control for the Easton walk. The Allentown group: N3QZR/Bob, AA3WM/Bryan, KB3GOU/Bejamin, KA1RAH/Brad, KB3FDM/Charlie, N3MFT/Jeff, W3JD/Joe, KA3RVH/Bill, and me N3QZT/Jeff was Net control.

Just a reminder about the **MS 150-2002 Bike event which will take place on the weekend on June 8th and 9th, 2002**. This is the largest public service event that the club participates in at this time and it requires a large number of hams (at least 25) to properly provide the level of communications the Multiple Sclerosis Society has come to expect from us over the last ten years. It is a two day event starting at the Velodrome in Trexlertown and overnighting at Kutztown University and then returning the next day. If you would like to help but can only help on one of the days that is not a problem. ANY Help is welcome. How about this year lets see some new faces along with the ones that have helped in the past.

You can contact me via e-mail at **n3qzt@ptd.net** or call me at home: **610 928-3897** or contact me on 146.700. Thanks...

de Jeff, N3QZT

DLARC Amateur Radio Classes

by Bob,KE3AW

Our spring series of amateur radio classes started on **March 25**, and consists of **21** prospective new hams and/or upgrades to General. **Chris/N3ULW** and **George/N3SQD** are the instructors.



There is again a wide variety of backgrounds and ages. There are also numerous "companion combinations" including spouses, father-daughter, mothers-sons, which always makes for good and regular studying! So far, interest in Morse Code is strong also, with class members looking forward to the many areas of the hobby, definitely including HF.

Look for new hams and new DLARC members in the near future from this group!

de Bob,KE3AW

The New England QSO Party!

submitted by Blair,K3YD

This is the first joint contest supported by all six New England states: Maine, Vermont, New Hampshire, Massachusetts, Rhode Island and Connecticut. The groups that have gotten together to make this happen are the Candlewood ARA (CT), Framingham ARA (MA), NH-ARRL (NH), CTRI Contest Group (RI), Central Vermont ARC (VT) and the Yankee Clipper Contest Club. New England QSO Party Rules

Object: To contact as many New England stations (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont) in as many New England counties as possible. (New England stations work anyone) Date: First full weekend of **May (May 4-5, 2002; May 3-4,2003).**

Contest Period: 2000Z Saturday until 0300Z Sunday (4pm ET Saturday until 11pm ET Saturday) and 1100Z Sunday until 2400Z Sunday (7am ET Sunday until 8pm ET Sunday).

Categories: Single-operator high power, low power and QRP categories, plus multi-operator, single transmitter. Same four categories for mobiles. Single-operator stations using assistance during the contest (packet or Internet spotting nets, etc.) will compete in the multi-single category.

Contest Exchange: Send signal report and state/province (DX stations send signal report and "DX"). New England stations send signal report, county and state. Valid Contact: Work New England stations once per band/mode. New England stations work anyone. CW contacts must not be made in the phone band segments. Mobiles can be worked again in new counties. County line QSOs should be logged as two separate QSOs. Crossmode, crossband and repeater QSOs are not permitted. QSO Points: Count one point per phone QSO, two points per CW (includes digital modes)QSO. Multiplier: Stations outside of New England use counties as multipliers for a total of 67 (CT/8 MA/14 ME/16 NH/10 RI/5 VT/14).

New England stations use states(50), Canadian provinces(14) and DXCC countries(maximum of 20) as multipliers. Scoring: Total score is QSO points times the multiplier. Mobiles count QSO points per county and multipliers from all counties (counted once).

Suggested frequencies: CW - 3540 7040 14040 21040 28040, Novice/Tech - 3705 7130 21130 28130, SSB - 3880 7280 14280 21380 28380, VHF - 50.150 144.205 146.55 223.5 432.150 446.0 Reporting: Logs should indicate times in UTC, bands, modes, calls and complete exchange. Multipliers should be clearly marked in the log. New England stations put your club's name on the summary sheet.

Entries must be submitted within 30 days and sent to NEQP, P. O. Box 3005, Framingham MA 01705-3005 or via e-mail to logs@neqp.org (Cabrillo format preferred). Send a large SASE for a printed copy of the results.

Awards: Certificates will be awarded to the top scorers (25 QSO minimum) in each New England county, U.S. state, Canadian province and DXCC country. A number of special plaques will also be awarded to top scorers (check the Web site for a current list, as it has not yet been finalized).

More information: The New England QSO Party Web site is at http://www.neqp.org. Check there for information on planned fixed-station and mobile activity from New England counties, contest software information, county abbreviations, plaques to be awarded and information on New England state county awards. NEQP results will be posted on the web site when they are complete. Questions: can be addressed to **info@neqp.org.**

How did I become a ham, you asked?

by JP, N3GWR

I had a couple of brushes with radio before I became a ham. When I was in Cub Scouts, I was hooked on getting all those merit badges, but I had very little money. I was reading the handbook on getting badges and I saw the Radio badge. It said all you had to do was build a radio, and the plans were there, and I had a lot of the stuff. I recall it needed a crystal earpiece, which I borrowed from my 5-transistor portable radio. It needed a coil of wire wound over a cardboard form.

I had a bit of wire from disassembling a 12 volt slot-car motor. I needed a detector, which could be either a diode bought (BOUGHT? With WHAT!) from a store, or a galena detector. Galena! I HAD galena in my rock collection! Reading on, I found that galena, a naturally occuring lead crystal, has semiconductor properties, and you were to "probe it with a catwhisker to obtain maximum signal ." At least that's how I remember it. And I was in luck. I had a CAT.

The cat avoided me for a month.

My radio did not work.

I shared my problem with a scoutmaster. He promptly pointed out that I had neglected to read the part about how the catwhisker was to be made out of a metal pin. But better than that, he had experience with this merit badge, and he GAVE me a real diode. It was a 1N34A, I recall. I put the diode in my crude circuit, and heard the sound of signals, both local and from around the world. I heard the Pottstown station WPAZ, and I lived in Boyertown, 5 miles distant! I heard Moscow, London, and some guys talking like they lived next door. Guess what, they lived less than 10 miles away!!! I listened for a long time and they mentioned local landmarks.

Some body told me they were ham radio operators. Today I know they were operating in the 75 meter phone band, but then those signals were mysterious. I also know now that the other substitution I had made had made my radio receive a higher frequency that it was designed for. I had substituted a paper towel core for the oatmeal box.

That was my first exposure to ham radio, and it would be more than 30 years before I became a ham radio operator.

In the meanwhile, I built a Heathkit GR-64, 4 tube wonder. At least I knew which end of the soldering iron to hold. But it was about 1988 when Blair Bates, was in my office.

I had already known Blair for about 6 years when his watch beeped on the hour. I looked at my watch and said, "You are 17 seconds off." "How do you know?", he asked.

"Because I set my watch by WWV, the National Bureau of Standards, using a shortwave radio."

"Oh?", Blair said, "Are you a ham radio operator?" "No.", I said, "but I've always wanted to be one." That's when he said, "Well, my callsign is K3YD, I am a ham, and I can help you become one." He did, and I am.

de JP, N3GWR

For Sale

I have a 30ft. Rohn tower with 4 antennas on it that i would like to be taken down,by the younger generation,and all of the antennas and tower will be put up for sale,the antennas are

Cushcraft 15 ele 2 mtr beam

Cushcraft 2 ele 2 mtr beam

Hy-Gain tri band 10-15-20 mtrs

3 ele 6 mtr beam

30 ft Rohn tower 3 pcs Anyone interested in the antennas or tower can see them,and make me an offer for each.. computer 486sx33 used only for amateur radio..you can call me at 610-758-9747

de Don, N3FEA

W3IGC estate sale

ICOM IC-746 Transceiver. HF bands, plus 6M and 2M, 100 watts all modes, with auto ant. tuner thru 6M. 18 mo. old. Price **$800**

ICOM IC 2KL 500 watt solid state linear with **IC-2KLPS** power supply. 500w pep out,ssb,cw,fsk. 1.8 thru 30 mhz. Price **$700**

ICOM IC-AT 500 HF Auto Ant. Tuner. Handles 500 to 1000 w. PeP Price **$500**

ICOM IC-2100 2M, 55watt fm mobile rig. Price $125

ICOM IC-T2A 4.5w Handheld, w/external mike. Price **$125**

ASTRON RS-20A 13.8v @ 20A D.C Power supply. Price **$85**

Johbson 52 ohm lo-pass filter. Price **$20**

Drake 52 ohm lo-pass filter. price **$20**

Contact Bob Walsh, W3YU @ 610 866 0348 or at w3yu@webtv.net.

Just the Minutes

by Jill, N3ZSR

President Jeff Keller, N3QZT called the April 4th club meeting to order at 7:30 PM, with 33 members and 4 guests present.



A motion to approve the March minutes was made by Gabe, KZ2A with a 2nd by Mike, K7PTL. Motion passed.

Treasurer's Report shown elsewhere in this newletter was accepted with a motion from John, WX3C with a 2nd by Bob, KE3AW.

Barry, N3NVA said that he is looking to get a receiver at Fleetwood. He and Don replaced the hard line at the Repeater site several weeks ago and corrected the Tic-Ticking problem. Barry and another person may get up the 6 meter very soon, Frequency 51.76 PL 1514.

Benjamin, KB3GOU, will be our Field Day Chairman, with the help of his father Bryan, AA3WM.

The VE Session for April had 1 registered person to take the test. Bill, N2DH has 2 VE's plus himself for the evening.

Classes started on March 25th, at Gracedale. There are currently 21 people enrolled.

Jeff welcomed the following guests to our meeting:

Sue Schoch - no call

Frank Hodges - no call

Luis Hernandez - no call

Pete, NL7XM

The following new members were voted in:

Wm. Bigg, KA3RBH-reinstatement on a motion from Bob, KE3AW and 2nd by Ken, N3IYX.

Jack O'Connell, KB3HDJ on a motion from Don, KA3JWE and 2nd by Ray, W3TDF.

Robert House, WB3JSZ on a motion from Willard, KA2VEM and 2nd by John, WX3C. All motions passed.

Jeff passed around a sign up sheet for the MS Walks.

Applications received that will be voted on at the May meeting are as follows:

Pete Varounis, NL7XM

Up Coming Events MS Walk -

April 21st / Bethlehem and Easton

May 5th Allentown

Ray, W3TDF gave a demo on a very old tube AM radio that was made in or about 1920 or 1921.

The evening program was a speaker from AAA.

The meeting was adjourned at 8:14 PM on a motion from Bill, N2DH and 2nd by John, WX3C.

de Jill, N3ZSR, Secretary

Delaware-Lehigh Amateur Radio Club, Inc.
Income and Loss Statement

Balance 2/28/02	**$4,741.05**
INCOME	
C D Transferred to Checking 3/15/02	$2,104.01
Class Materials	13.00
Club Dues	62.00
Donation Income 50 - 50	31.00
Interest Checking	8.03
TOTAL INCOME	**$2,218.04**
EXPENSES	
Education Class Materials	$162.45
Hamfest Tickets 300	54.00
Hamfest Flyers 5,000	160.00
Newsletters for March	36.75
Postage	99.00
Telephone	28.78
TOTAL EXPENSES	**$540.98**
Balance 3/31/02	**$6,418.11**

de, Dick, KA3MOU, Treasurer

VE session

by Bill, N2DH

Upgrade to Extra
Jim Eschleman N3VXI

VE's
Bill N2DH
LeMar N3AT
Carlos KE3RC

How I became a ham

I1HJP,Piaolo

Supplied by Bob, N3QZR

When I became ham radio my CW teacher asked my to learn the ham radio code.I have never forgotten these code and please read these few lines and please ask yourself some question

The Radio Amateur is:

Considerate...never knowingly operates in such a way as to lessen the pleasure of others Loyal...offers loyalty, encouragement and support to other amateurs local clubs, and the American Radio Relay League, through whitch Amateur Radio in the US is represented nationally and internationally

Progressive...with knowledge abreast of science, a well - built and efficient station and operation above reproach

Friendly...slow and patient operating when requested; friendly advice and counsel to the beginner; kindly assistance, cooperation and consideration for the interests of others. These are the hallmarks of the amateur spirit

Balanced...radio is an avocation, never interfering with duties owed to family, job, school, or community

Patriotic...station and skill always ready for service to country and community The original Amateur's Code was written by Paul M. Segal, W9EEA, in 1928.

de I1HJP Paolo

Bernie Fuller N3EFN gets Scout Award

ARRL Atlantic Division Director Bernie Fuller, **N3EFN**, has received the District Award of Merit from the French Creek Council of the Boy Scouts of America. Fuller was recognized for his work with the Venturing program of the Boy Scouts in his capacity as Venturing Chairman of the council's Oliver Perry District.

The District Award of Merit is the highest award that a district can bestow upon a volunteer. The Venturing program of the French Creek Council was recognized recently as second in the nation during the past year in terms of increased participation and number of new Venturing Crews. Fuller also has been elected Vice President-Venturing of the French Creek Council Executive Board. In his new volunteer position, he is responsible for the Venturing program for the entire Council, one of the largest in the US.

The Venturing arm of the Boy Scouts of America is composed of young men and women ages 14 through 20. A number of Venturing Crews who have chosen to concentrate their activities around Amateur Radio.

The ARRL Letter

ARRL to Process renewals

ARRL will process members' license renewals, address changes: ARRL members daunted by the FCC's Universal Licensing System

http://wireless.fcc.gov/uls> can ask Headquarters to file their license renewal or change-of-address applications free of charge. ARRL members wishing to take advantage of this service should download Form NCVEC 605 (that's the form used by volunteer exam coordinators) from the ARRL Web site **<http://www.arrl.org/fcc/ncvec605c.pdf>,** print it, fill it in and mail it to ARRL VEC, 225 Main St, Newington CT 06111. The response of those wanting ARRL to process renewals has been very positive. For the first three months of 2002, ARRL handled 1721 applications for members--up from 514 for the same period in 2001. The ARRL VEC staff now can process any member's FCC license application request, except for a vanity call sign application. Remember: Renewal applications may only be filed within 90 days of your license expiration date.

The ARRL Letter

Young Ham Scholarship Program

YHOTY nomination deadline nears: Nominations close **May 30** for the **Amateur Radio Newsline** Young Ham **of** the Year Award for 2002. Created in 1986, the award recognizes one young radio amateur under the age of 18 in the continental US for his or her contributions to society through Amateur Radio. Nominating forms and additional information are available at the Amateur Radio Newsline Web site, **<http://www.arnewsline.org>.**

All nominations and materials required by the official rules must be received by Amateur Radio Newsline by May 30, 2002.

The ARRL Letter

Yankee Doodling

My favorite Ham Radio website

by Blair K3YD

There are many, many websites on the internet offering Amateur Radio news, information and products. Of these, my favorite by far is e-Ham. **(http://www,eham.net)**



"How come?" you ask. Well, besides being a good, timely info source, the site serves as a portal to many other sites, offers some unique resources, and includes some interesting technical articles.

My favorite section is Product Reviews-submitted by happy (or Unhappy) users. We've all seen the glowing or mostly glowing reviews in CQ and QST. It's rare when a reviewer for one of those publications honestly tells you that a certain piece of gear is a piece of junk! (RADCOM, the British counterpart of QST and a publication of RSGB, is famous for their scathingly honest reviews, but that's a story for another day.) E-ham users are quick to point their perceived deficiencies of all kinds of amateur radio products: transceivers, antennas, software, accessories, etc. There are some reviews which appear to reflect a particular bias, but if a radio is reviewed by 50 users and 46 praise it highly-chances are it's a pretty good item! The occasional contrary review may point out an obscure fault, an unrealistic expectation, or perhaps a fault unrelated to the product-like lousy customer service. I wouldn't buy a new (or new for me) piece of gear without first reading the e-Ham reviews.

What else is there? Well the bottom of the page lists recent DX-spots from the internet, with a link to a full page window with 25 or 50 spots which can be configured by your choice of band(s) displayed. You like to chase special event stations? You'll find a calendar of listing there. Visiting Florida and want to know if there are any hamfests near the in-laws house? A quick search brings up the Florida hamfest listings. In all honesty, this is one of the weaker features of e-Ham because it is dependant on publicity postings by the 'fest organizers-some don't seem to know about this site, yet. The recent Cherryville hamfest, at Clinton, NJ, wasn't listed here. A mistake which may have reduced attendance.

I mentioned e-ham as a portal. The Ham Links section is excellent. I was looking for some antenna supplies recently. A quick click to "Ham Links" then "Commercial (coax/wire/insulators)" led me to a page of antenna supply vendors. There I not only found the feed-through insulators (for ladder line) I wanted, but some clamps for ladder line as well. Want the latest contesting news? E-Ham is linked to the http://www.contesting.com web-site also. You'll find surveys, a search for help on particular topics, and articles. Several months ago, there was a write-up for a simple, 1-chip audio processor for the FT-817 QRP radio. Interested? The articles are archived; just search the "Articles" link. The news highlights from the ARRL letter and other news sources, such as the FCC, are posted here, too.

This page is so well designed and so complete that I'm still finding features, and more are added every month.

I'm an ARRL member, but I find e-Ham both more interesting and more useful than the ARRL website. How useful? I visit the ARRL page about every 10 days, but I log into e-Ham every day that I'm on the web. Give it a try, I think you'll like it.

de Blair, K3YD

Amateurs help British ham-sailor

British ham-sailor expresses gratitude for amateurs' assistance: David Beane, G0TAG, this week expressed his thanks to members of the Maritime Mobile Service Net, who assisted him and his wife, Sarah, after their sailing vessel Tao went aground March 26 off Cuba.

Amateurs were able to contact Cuban authorities, who secured the vessel and later helped to refloat it. "Having got our brains back together after our nasty incident we wish to send our thanks to the guys on the Maritime Mobile Net who acted with such efficiency when we went aground on the north coast of Cuba," Beane said.

"The Cubans helped to lay out our anchors and stood by us during the night." They also arranged for a tow boat, Beane said, but as it turned out, a tow was not needed as the couple managed to get their sailboat into deeper water by themselves. Cuban fishermen then escorted the Tao into the ocean through a gap in the reef, and in port at Moa, two divers checked out the underside for damage--all at no cost, "just a lot of smiling and waving." Beane said. ***The ARRL Letter***

AMATEUR SCIENCE R.I.P. for D.I.Y.

SCIENCE TINKERERS CONTINUE TO TAKE IT ON THE CHIN

by George,KF6FOJ

Supplied by Tom, N3TTQ

SCIENCE'S NEXT GENERATION: AT RISK? Electronics tinkerers, software hackers and radio hams have long played crucial roles in the development of modern technology. Will they continue to? In the near term, the answer is clearly yes. Steve Ciarcia, editor of Circuit Cellar magazine, says that most of his 30,000 subscribers work as engineers. Tinkering keeps them up-to-date. Yet these elite have left other amateurs so far behind that it is hard to draw new people into their ranks. Although Silicon Valley innovators often trace their career interest to childhood hobbies, those hobbies attract fewer of today's young people. Gordon West, a well-known ham radio instructor, says: "We're getting more kids than 10 years ago, but I don't think that ham radio will pull kids into the field like it used to."

EDMUND SCIENTIFIC LIVES ON

Although Edmund Industrial Optics closed its giant retail store in Barrington, N.J., last year, it still operates a smaller store on the site. Anchor Optical Surplus sells mirror blanks, chipped lenses, fiber optics and sundry surplus gizmos. Unfortunately for techno-pilgrims, the store is closed on weekends. As for the catalogue operation, it was bought by Science Kit and Boreal Laboratories, the nation's largest distributor of science products for K–12 education. Some products have been dropped, but the selection is substantially the same.

Image: **PETER MURPHY HAM RADIO** remains a vibrant hobby, as is evident at flea markets such as this "Hamfest" in Clinton, NJ. But after a growth spurt in the 1990s, the number of amateur radio enthusiasts is starting to drop. Several years ago I walked into Fry's Electronics in Palo Alto, Calif., and asked for an inductor. It is hardly an unusual electronic component; every radio project needs one. Yet the store clerks looked at me blankly. Fry's once had a reputation as the first stop for young engineers stocking a garage workshop. But in its components aisle, I found just a few bags of parts.

"The art of home-brewing one's own electronic equipment is pretty much a lost one," says Chuck Penson, a radio ham in Tucson, Ariz. The D.I.Y. movement that spawned the computer revolution--and inspired untold numbers of tinkerers to pursue careers in science--has stopped moving. Heathkit ceased making its electronic kits 10 years ago. Popular Electronics and Byte magazines have hung up their soldering irons. Meccano, the maker of Erector sets, went bankrupt in 2000. Last year Scientific American dropped the Amateur Scientist column, citing a long decline in readership, and Edmund Scientific sold off its consumer catalogue and shut its famous retail store in Barrington, N.J.

"It was a Mecca for the science enthusiast," recalls Nicole Edmund, vice president of marketing and sales at Edmund Industrial Optics and granddaughter of the company's founder. But the store's sales had been drooping for most of the past decade, she says, and the company wanted to focus on its more profitable optics business.

What we seem to have witnessed is the fragmentation of amateur science. Heathkit, for example, appealed to a broad range of people. Some built kits for kits' sake. Others just wanted to save money: Heathkits were usually cheaper and better than store-bought radios or TVs. As manufacturing costs went down and quality went up, though, off-the-shelf products gained the advantage. The same went for telescopes and most other gizmos. "When I got started, I could not have purchased what I could have built," says Dennis DiCicco, an editor at Sky & Telescope magazine. "Today if you want a telescope, you can afford one. You're not going to save much money if you build one."

As the market split between craftsmen and appliance owners, magazines had to adapt or die. In the late 1970s computer hobbyists of all ability levels devoured Byte. As PCs went mainstream, the magazine played down home-brew projects. Advanced amateurs, meanwhile, outgrew the projects and gravitated to niche publications. Circuit Cellar, started by ex-Byte columnist Steve Ciarcia, succeeded with a new publishing model: as its readers became more sophisticated, so did the articles. "I saw that you had to move upscale with them, or they'd move away from you," Ciarcia says.

Indeed, dedicated amateurs are now quasi-professionals. The Society for Amateur Scientists conference taking place next month in Philadelphia will have sessions on how to publish your research and how to claim a tax deduction for your basement lab. Discoveries by amateur astronomers have made headlines.

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Continued from Page 7

At the other end of the market, people with an occasional science craving can satisfy it at, say, the Nature Company. And for those who fall in the middle, a few kit suppliers (especially in robotics and music production) and magazines (such as Nuts & Volts and Poptronics, formerly Radio Electronics) carry on.

Of course, market fragmentation is not the only trend affecting amateur science. There are more leisure activities than ever to choose from and less time to pursue them. For electronics retailers, the general decline of D.I.Y. is merely one among many changes in the industry. Brad Jonas of Green Brook Electronics in Green Brook, NJ., one of the few mom-and-pop electronics shops left in the greater New York area, talks about death by a thousand cuts. People who need parts now get them by mail-order (although they come to the store for advice), small companies buy equipment rather than build it in-house, and repair stores swap out whole modules rather than replace individual components. Even Radio Shack has had financial troubles, although the restructuring it announced last December does not affect electronic parts.

Evidently, the something-for-everyone model epitomized by Heathkit and the Amateur Scientist column can't compete anymore. Specialized sources and Internet newsgroups cater to each skill level. But much of the mentoring and serendipity that the diverse community of amateurs offered has been lost. It is hard not to regret its passing.

de GEORGE MUSSER, KF6LOJ

Ed Hart, W3NF a Local Legacy

One of the founding members and past president of DLARC was Ed Hart, **W3NF/W2ZVW** a native of Easton and Phillipsburg. His brother, George Hart, W1NJM (formerly W3AMR) wrote a fascinating feature story about him published in the Winter 2001-2002 issue of the QCWA Journal. It is the > first of a series. It talks about Ed electrifying the steps leading to his third floor shack and the wall surrounding and ladder to his summertent shack, in the 1920s, when he was first licensed as 3NF. The W prefix came in later years.

Every DLARC member should read it. Ed was one of my elmers in 1955. (The others were W3PYF and W3FVT). He was even W3PYF's elmer, and that was long before "elmer" name was used. Ed operated very high speed CW handling traffic around the country from his two homes and also from his mobile! That is right, he relayed messages on CW across the country while driving. He had a panel van in the 1950s with H.F. whips on each of the four fenders. In those days DLARC kept in touch on 10 meter AM, long before 2 meter FM > and repeaters were around. Try to read this article.

I hope that W3PYF can reprint it for the DLARC W3OK Corral. It may be too long, so I hope some member can scan it and upload the article to this DLARC forum. George retired from the ARRL staff and still lives in the Hartford, CT area. Ed and George grew up and operated ham radio from their parents' College Hill, Easton home in the 1920s and 1930s. Their father was a >chemistry professor at Lafayette College. In those days their home was lit by gas, with little electric wiring or use.

Ed was a pioneer in the radio and TV repair business, and then worked for Lafayette College building and repairing electronics equipment in the 1950s. I used to visit him in his Lafayette lab, after March junior high school classes > from 1950 to 1956. Ed later was chief engineer at Barker & Williamson (B & W) in Bristol, PA, a popular manufacturer of ham radio transmitters, amplifiers, antenna tuners, antennas, and accessories in the 1950 to 1970 era.

Another DLARC member, Elmer Bush, W3FVTsucceeded W3NF at B & W. Ed built an antenna farm on his grandparents' farm in Williams Township, south of Easton, using many electric utility poles with wire V beams. All the wires came to a central pole with a remote switch. The were laid out in the fashion of a wagon wheel. This was before yagis were made and sold. He and many more of us used center fed Zepp antennas, fed with home made 600 ohm ladder line. He, I, and others made our own feed lines using Popsicle sticks for spreaders on the ladder line Very few hams had commercially made transmitters in the 1940 to 1960 era. No one commercially made wire antennas. We all used the ARRL Handbook and friends' advice to make our own antennas. Ed was an institution in ham radio. We were lucky that he lived here and was a member of DLARC.

de Bill, K3ANS

ARES Teams activate following fatal train wrecks

Amateur Radio Emergency Service (ARES) teams in California and Northern Florida activated recently to assist in the wake of separate train wrecks.

In Florida more than half the cars of an Amtrak "Auto Train" carrying 418 passengers and 34 crew members derailed **April 18** near Crescent City. Putnam County ARES established emergency communication from the site--on the Putnam/Volusia county line--shortly after the wreck and also staffed a shelter and two hospitals. Four people died as a result of the mishap and more than 100 others were injured.

Billy Williams, N4UF, of Florida Crown District ARES, said the American Red Cross responded in the accident's immediate aftermath. Red Cross communications were set up on a VHF repeater with help from Duval County amateurs. Other amateurs pitched in to staff a Red Cross shelter and the Putnam County emergency operations center. ARES members also were deployed at a local hospital as well as at hospitals in Jacksonville that were put on alert to receive patients.

Within 15 minutes of the wreck, the Florida Crown Emergency Net activated on a linked repeater system. A third repeater served as a base of operation for Putnam County ARES, under the direction of Putnam County Emergency Coordinator Mark Bradford, WF3F. That repeater was linked to a Jacksonville repeater (W4IJJ) to handle Red Cross requests between the Jacksonville Red Cross Headquarters and the scene of the wreck some 60 miles away, Williams said.

The shelter and triage center at Crescent City High School reported a peak population of more than 300 via Amateur Radio--most believed to be passengers who were able to walk away from the scene. Amtrak later bussed remaining passengers from the shelter to hotels for the night, and the amateur operation was able to shut down.

More than a dozen hams assisted in the ARES response. Additional details are on the North Florida Amateur Radio Society Balanced Modulator Web site< **http://home.earthlink.net/~bfwillia/_wsn/page4.html>.**

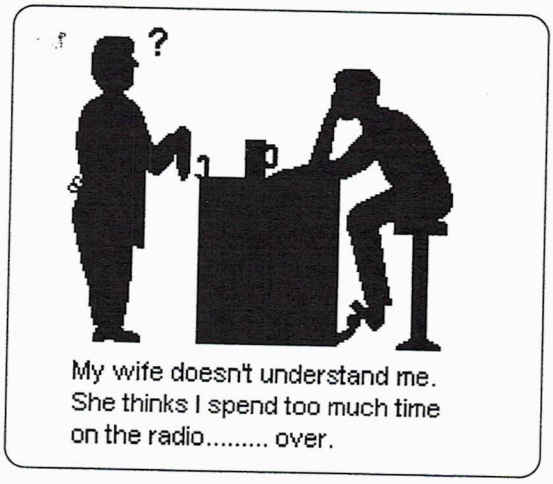
In California, a freight train collided head-on **April 23** with a Metrolink double-decker commuter train. Ironically, the mishap occurred just as hospitals and emergency responders in Orange County were about to hold a large-scale drill to test patient triage and transportation procedures for mass casualty incidents.

Two dozen members of the Hospital Disaster Support Communication System (HDSCS)-- a special ARES group that always participates in the drill--were awaiting assignments when word came in of the train collision. Two passengers were killed and more than 200 were injured--many seriously. Orange County ARES Emergency Coordinator and HDSCS Net Control April Moell, WA6OPS, immediately assigned the drill-ready hams to the 14 hospitals expected to receive crash victims. For the next 4-1/2 hours, 28 HDSCS members provided vital links among the hospitals, the county's ambulance dispatch center and the county's emergency medical service agency.

Net traffic included verifying victim dispatch and patient counts, providing hospitals with information for inquiring family members, and liaison with hams supporting the Red Cross. Within some hospitals, hams provided direct communication among triage areas, emergency departments, and command posts.

Moell is founder and Emergency Coordinator of the ARES group. More information is available on the HDSCS Web site< http://www.hdscs.org>.--thanks to Billy Williams, N4UF and Joe Moell, K0OV.

The ARRL Letter



The following article first appeared in the Winter, 2001 issue of the QCWA Journal. It is being reprinted hear with permission from the author, George Hart, W1NJM, as well as the editor of the QCWA Journal, Gerry Wentz. Thank-you George, Gerry, and the QCWA Journal!

Random recollections of an Old Ham

by George Hart W1NJM

A journalistic history of the life and times in Amateur radio of George Hart, W1NJM

This is the first installment in a series of stories excerpted from Mr. Hart's book, "Random Recollections of an Old Ham."

The Early Years—I never really liked the term "ham" as it applies to Amateur Radio. It has a negative connotation to me, in the same sense as "lid," meaning an inferior operator; but through the years it has been accepted. An Amateur Radio operator is a Ham, and Amateur Radio is Ham Radio So be it.

It's hard to say just when I became interested in ham radio, except that it was at a very early age. We lived in a large frame house on the campus of Lafayette College, on a high bluff overlooking the city of Easton, PA. My father was an eminent professor of chemistry at the college (see "Edward Hart: a Biography"). There were six of us; my father, my mother and four children: Edward, Jr., the oldest; Watson; George, myself and Martin, the "baby." Edward, Jr., will be prominent in this account, my father less so, my mother and two other siblings hardly at all. We called him "Bunch," a derivative of "honeybunch" from childhood that lingered for many years. When he was 9 years old he built his first "crystal" set and heard his first on-the-air signal—a faint whistle emanating from a local radio station, WMAP, owned by the Edison Battery Company. This was in 1919. From then his interest in electronics burgeoned, culminating in his receiving his first ham license in 1925 with call letters 3NF. This was an "amateur class" license, which at that time gave him full amateur privileges. My two other brothers showed little or no interest in Bunch's shenanigans; but he was highest in the "pecking order" among the four of us. I was fascinated by and afraid of him, and he did little to mollify this feeling; but my showing of interest in his activities brought me closer to him—a closeness that increased and developed well into maturity.

What activities? When he was about 12 (this would be 1922) he obtained permission to move into one of the two third floor rooms of the big house. The two attic rooms were unheated, used mostly for storage (and a little hoarding during WWI). Here Bunch established his electronics laboratory and chamber of horrors in which he terrorized the rest of us with his budding electronic genius. The attic rooms were accessible only by a very narrow staircase from the second floor corridor.

Bunch's first act, upon acquiring access to one of the third floor rooms, the one facing south overlooking the city (the other room was used for miscellaneous storage) was to secure his privacy by electrifying the narrow staircase with a spark coil that could create a spark two or three inches in length. The voltage developed was extremely high, but the current very low, so that the "shock" upon contact could be painful but not dangerous. These devices were in common use in the teens and early twenties for radio communication. Only one room in the big house was wired for electricity at that time. This was the room to the left of the third floor staircase, saved for and occupied by my uncle, Martin Marasco, my mothers brother, a chemist employed by the DuPont Film Works in Parlin, NJ, who "came home" every weekend. Uncle Martin was a great favorite with us kids, indeed of all the family including my father because they had a love for chemistry in common. But Martin had other talents as well, one of which was a knowledge of electricity. During his many visits when we were small children he ran an overhead line from my father's laboratory, which was nearby and wired for electricity, to his room in the house, so he could enjoy the luxury of electric lights in his room, which he was accustomed to at the club where he lived in Bound Brook.

An aside: what did we use for lighting in the rest of the house? Gas. Gas lines were piped all through the house from a central facility in the city. Each room was equipped with a gas outlet, often using mantels to make the light brighter. In some, a fixture using a small pilot was activated by a pull-chain, and the light emitted was usually brighter than that emitted by most of the carbon-filament light bulbs of the day. My father saw no point in having the house wired for electricity, at considerable expense, when the gas lines were already available; but he raised no objection to Uncle Martin's activity.

Bunch, with Uncle Martin's advice and assistance, ran an electric line up to his attic room and from there proceeded to run extensions all over the room and down the stairs. There was no BX cable, much less Romex, in those days. The line from the laboratory to Martin's room was two separate wires, and from this room to Bunch's attic room ran in channels carved in wood stripping along the baseboard and up the stairs. When the installation was complete, Bunch proceeded to erect a control panel on the wall alongside his big iron bed, and lines back down the stairs to the first three steps. These he attached to homemade switches made from Meccano parts, one switch on each step. Then he placed a board over each switches so that anyone stepping on it would close the switch. The wiring was configured so that anyone mounting the steps would cause lights to light on the switchboard, thus notifying him that someone was coming up.

He planned to add another switch on his board, which would give the approaching person a jolt of electricity if he continued up the stairs without permission, but found that the standard house voltage was not high enough to penetrate normal shoes. So he obtained a standard lead-acid storage battery and a tungsten charger and used a spark coil to supply the necessary voltage.

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He laid copper screening across the first three steps so that pressure would set off the spark coil with a voltage high enough to penetrate even rubber-soled shoes. This had the desired effect and gave Bunch considerable glee when an intruder (usually one of his three brothers, but visiting teenagers as well) was subjected to the startling shock. I suspect Bunch had a sadistic side to his nature.

As time went on, Bunch added refinements to his setup. He set up three lights at the top of the steps: a white one and a red one. When someone wishing to enter his domain stepped on the first step, a light would go on Bunch's switchboard, but nothing would show at the top of the steps. The second step would show either a white light or a red one, depending on how Bunch had it set up. If a white light. It meant OK to come up. A red light meant keep out. If a red light showed and the person stepped on the third step, he would receive a sharp jolt from the spark coil. Bunch could have it set up so it operated automatically, or he could operate it manually. The former was intended to forbid entry even if Bunch was not in his room.

But the system had an outstanding flaw. One could easily outwit the system by avoiding that third step and continue up the steps whether the light showed white or red. Bunch eliminated this by putting metal screening over all the steps and wiring the spark coil to all of them, plus to the metal doorknob so that the spark coil would activate when the doorknob was turned or could be activated manually to shock anyone on any of the steps. It was wickedly ingenious. He also wired his bed so that he could shock anyone leaning on it (but the high voltage would not penetrate the mattress) and various chairs and other items of furniture in the room. Throughout his teens he exercised complete domination of his attic room. Our father, who was quite elderly, hardly ever ventured up the steep stairs. On only one occasion can I remember a visit by him to Bunch's third floor domain, subject to be covered later.

In the summertime, Bunch set up a tent in our mother's hanging garden, a small area below our house cut into the side of the hill. Our mother raised flowers and a few vegetables there, but there was plenty of room left over for a tent, and electricity was available from our father's chemistry laboratory, which was nearby with its ground floor on the same level with the garden. Here a wooden platform was constructed and the tent pitched over it. It was a sizable wall tent, capable of containing four cots, and here we set up our summer quarters. The garden was accessible from the house down a steep embankment, across a cinder access road to the college heating plant. The far side of this road was contained by a 12-foot stone wall, so one had to go down the road fifty feet or so to access a path into the garden area. We boys flew down the embankment with abandon, but our mother walked from the house to the upper part of the access road, down the road to the path, a sort of zig-zag configuration; however, in the late 20's she all but abandoned the garden, so we had the area to ourselves.

Bunch exercised the same autocratic control over access to the tent as he had to his attic radio room. The 12-foot wall was a little too high to jump from, so Bunch fashioned a ladder from scrap boards. He wrapped the rungs of the ladder with bare wire and attached a 110-volt line controllable from the tent. When someone he didn't want was spied coming down the ladder he could press a switch at the tent to electrify it, thus giving the intruder a severe jolt, then ordering him back up the ladder. Occasionally. He would give someone a jolt "just for the fun of it." Most of us avoided the ladder entirely, preferring to use the circuitous path to avoid the possibility of being shocked, but Bunch, being the oldest, used other methods of excluding us from the tent if he wished privacy, some electrical, some physical. One rainy night my brother Watson decided to defy the ban and started to descend the ladder. Bunch threw the switch and Wats froze on the wet ladder. When Bunch turned off the switch, Wats continued his descent, so Bunch turned it on and left it on. Wats clung to the ladder, shrieking.
"If I turn it off, will you go back up?" Bunch inquired. Wats was unable to reply, so Bunch turned it off and Wats went back up the ladder, whimpering. That was the end of the electrified ladder. My father, when the incident was reported to him, forthwith ordered the ladder taken down. Bunch disconnected the wiring, but we continued using the ladder, because of its convenience, and his tyranny continued in other ways, both electrical and physical.

Bunch's on-the-air activity decreased during the summers, but he did have a small station set up in the tent, with antennas strung about the many surrounding trees. My two other brothers seldom slept in the tent, but Bunch slept there every night and I quite often. He favored me only slightly because I helped with his many experiments, in a "gofer" capacity. Other friends his own age were favored more than I was, and I recall one girl, a visiting relative of one of the college professors, who spent much time with us one summer, although she never slept in the tent. I hated her because Bunch favored her more than he did me, and because she treated me with lofty contempt. But that was only one summer, then she was forgotten. Bunch was much admired by girls, a phenomenon I could never quite understand.
When he got his first ham ticket, some time in 1925, he somehow acquired one of Paul Godley's "Paragon" transmitters. My memory, which may or may not be entirely accurate, tells me this transmitter used a single RCA UX-210 in a self-excited oscillator circuit. It had no power supply, so Bunch used the 110-volt house service for plate voltage. The receiver he built himself, a 201-A detector and a 201-A audio amplifier powered exclusively by batteries—a lead-acid storage battery for filaments and Burgess "B" batteries for plate voltage. It was a regenerative type fashioned from a description in QST. Reception was by headphone only—first Brandes, then Murdock, and finally Baldwin. The latter were the best, but very heavy.

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The only speaker we boasted at the time was a horizontal cone by which the headphones could be clamped on the narrow end. We seldom used it except for BC reception or very strong ham signals.

The Paragon transmitter operated only on the 160 meter band. The antenna was a random piece of wire fastened to a nearby tall maple tree, with a counterpoise about 10 feet above ground. The power reaching the antenna must have been extremely low, because on-the-air contacts were few and far between, and usually the signal strength reports were quite low, R-3 or R-4 on a scale of 1-9. Signal quality was equally low, for few amateurs of the day possessed means of rectifying and filtering the plate voltage. Most signals had a characteristic 60-cycle rasp as broad as the traditional barn door. Some were rectified to a low-frequency buzz, and a very few had the most desired musical quality. Those that did were usually chirpy or otherwise unstable. On rare occasions I would come across a signal of high-pitched musical quality that was steady, and I would sit and listen to it in rapture. It was beautiful music to my ears, better than the most brilliant symphony.

From the time Bunch got his first license, in 1925, until I made my first on-the-air contact in late 1926, I was learning the code "by osmosis."' Bunch allowed me to use the receiver occasionally, with plenty of restrictions. At other times I would sit and listen to him sending on his Western Union straight key. I was only 11 years old. Soon I learned to recognize CQ. 3NF (Bunch's assigned call), a few commonly used letters and combinations such as "Q" signals. I never sat down and "memorized" the code, either by dots and dashes or by sound. I learned the code the way a baby learns to talk, by listening and mimicking.

By 1926, after trying in vain to make the Paragon perform on 80 meters, Bunch cannibalized it and built an entirely new transmitter on a "breadboard." A new inductance was wound around an oatmeal box, several plates removed from the Paragon's variable capacitor, other parts as necessary fashioned from whatever materials were available or could be purchased. New coils had to be wound for the receiver. It was a makeshift, ragtaggle setup, but he finally got it working and entered the new world of 80 meters. All connections were made by twisting wires together, or by binding posts or Fahnstock or small spring clips with teeth. The gridleak resistor was a mayonnaise jar filled with borax solution in which copper electrodes were inserted. There were a few parts which could be purchased at electric stores, none of them intended for amateur radio;. Most parts had to be fashioned by hand from whatever material was available.

One thing Bunch did obtain, I've forgotten where or how, was a squatty transformer manufactured by GE for RCA. It delivered 550 volts each side of centertap and also 7 -1/2 volts to light the UX-210 filament. This was a big improvement over the toy train transformer and 110-volt house current previously used and figured to give us a much stronger signal. I say "us" because by that time I was definitely part of the picture, although Bunch still held all the reins of authority and exercised them fully.

Still, with the increased power and the shift to 80 meters, our signal reports were unsatisfactorily low and only about 1 in 5 calls received answers. Bunch hardly ever called CQ, because experience indicated the unlikelihood of a call. A typical hour at the key might produce four contacts in about 20 calls. Frustrated, he continually tinkered with the transmitter and antenna system, trying to get better performance.

Coming in the next installment: Tapping the Trolley Line.

The Prez Sez

by Jeff, N3QZT

I know you are tired of hearing and reading about various club members who are looking for help with any one of any of the public service and other club events that are done by the club. Well I would like to make one last appeal to you to try and get more involved with some of the clubs activities. It has gotten to a point where only a small group of club members are doing all of the club activities.



And this group is getting smaller all the time. This means that we can no longer provide the level of support to the event that has been there in the past. It is felt by the Executive Board that if we continue to experience problems getting volunteers for events, that we will not be able to participate in some of these events. I really would hate for this to happen, as our club has a long history of helping out, but participating in fewer events and being able to do the job correctly is much better then showing up with to few people to provide adequate coverage for an event.

Now on to something that is not so down beat. Some new procedures have been put in place for using the club station. A sign in book is in the station; please use this when ever you go to the club station. This sign in book is in addition to the log book that is to be filled out when ever the clubs radio equipment is used to make any contacts. This new procedure will start immediately and is for all people who use the station. Thanks for your cooperation in this matter.

de Jeff, N3QZT President

River Run and DID

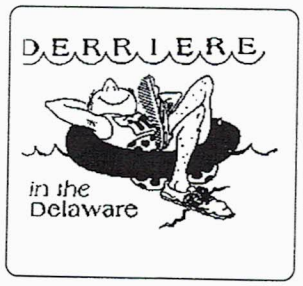
by Charlie, N3VUO

The Lehigh Valley chapter of the American Red Cross is asking the membership of the club for volunteers for the 12th annual American Red Cross Lehigh Valley River Relay Run. I will need about 10 operators. The event begins in Canal Park, Allentown and ends n Riverside Park, Easton.



It will be held on July 12st.

Please contact me either by e--mail at n3vuo@juno.com or telephone. As in the years past the funds raised go to the disaster relief services to assist families that need assistance after a disaster such as a fire, weather storm etc. Together the American Red Cross and the club can save a life. Thank you for your consideration and time in this matter.



de Charlie, N3VUO

PS: In addition, the same day there will be the **Derriere in the Delaware**, I'll keep you informed.

de Clarence, W3PYF

ARRL gets in some prime face time at NAB Confab

via ARRL Letter

ARRL officials this month took advantage of the National Association of Broadcasters convention in Las Vegas to promote Amateur Radio among members of the broadcasting community--many of them already amateur licensees themselves. ARRL President Jim Haynie, W5JBP, this year became the first League president to attend the annual NAB gathering since it's been held in Las Vegas. While there, he also met with local amateur leaders and spoke at the Las Vegas Amateur Radio Club meeting.

Other ARRL officials attending the April 8-12 convention included Pacific Division Director Jim Maxwell, W6CF, and Vice President Fried Heyn, WA6WZO--the former Southwestern Division Director. "President Haynie, Director Maxwell and I covered a lot of ground," Heyn recounted.

The ARRL booth--larger than in years past--was managed by Bill and Carolyn Cornelius, K8XC and K9XC, with help from volunteers who included Nevada ARRL Section Manager Jan Welsh, NK7N. Heyn thanked NAB Vice President for Science & Technology John Marino, KR1O, for hosting ARRL at the show, which typically draws some 100,000 attendees.

Haynie also greeted those attending the popular Amateur Radio reception--sponsored by Kenwood Communications and CQ Communications. The reception drew an estimated 600 to 800 amateurs. Haynie briefly mentioned ARRL's Amateur Radio Education & Technology Program ("The Big Project") and said he hoped to be back again next year to promote it at the NAB gathering.

Heyn said the ARRL contingent found several of the NAB convention programs of particular interest. These included separate breakfast sessions hosted by FCC Chairman Michael Powell and by Sen Conrad Burns of Montana and six members of the US House. Heyn noted Burns' pronouncement that Congress needs to provide better guidance in the radio spectrum allocation and management arena. The Montana Republican told broadcasters he plans to file a spectrum reform bill, and he predicted a two to three-year battle. Burns sits on the Commerce, Science and Transportation Committee--the same panel that now has the Amateur Radio Spectrum Protection Act bill before it. He's the ranking minority member of the communications subcommittee.

The Senator also said he hopes to see the empty Democratic seat on the FCC filled soon. The White House nomination of Jonathan Adelstein is tied up in Senate political wrangling. Burns has said he backs Montana Public Utilities Commission member Bob Rowe for the job.

Heyn said after the show, "My general impression was that 'the digital age' is coming together."

The ARRL Letter

All Amateur Radio Operators are invited to
Participate in the DLARC, RACES & ARES nets
146.70 and 444.90 W3OK/RPT (pl 151.4) with an alternate of W3PYF/RPT 145.11
W3OK trustee Chris Hornaman, NU3L
The Nets are held on Wednesdays at 7:00PM

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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
7:30 PM at IU 20 Building in Palmer Township
TALK IN ON 146.70

Any comments or articles contributed to this newsletter
should be addressed to *(w3pyf @aol.com}* or Clarence Snyder, W3PYF Editor.
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